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FILE 'USPATFULL' ENTERED AT 12:37:37 ON 27 OCT 2003

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=> e rosen, c/au
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E3
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                 ROSENABUM S/AU
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                 ROSENACKER A F/AU
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E8
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                 ROSENAGER L/AU
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                 HASELTON AARON/AU
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                 HASELTON C J/AU
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            4 FUSION ALBUMIN PROTEIN
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     ANSWER 1 OF 2 USPATFULL on STN
L1
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Nucleic acid encoding HIV-1 tat protein

TΤ

AB Nucleic acid encoding a functional HTLV-III/LAV (HIV-1) protein having trans-activating ability, and expression vectors comprising this nucleic acid are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104629 USPATFULL

TITLE: Nucleic acid encoding HIV-1 tat protein INVENTOR(S): Haseltine, William Alan, Cambridge, MA,

United States

Rosen, Craig A., Brookline, MA, United States Sodroski, Joseph Gerald, Cambridge, MA, United States Wong-Staal, Flossie, San Diego, CA, United States Arya, Suresh K., Gaithersburg, MD, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

The United States of America as represented by the Department of Health and Human Services, Washington,

DC, United States (U.S. government)

NUMBER KIND DATE
US 5801056 19980901

PATENT INFORMATION: US 5801056 19980901 APPLICATION INFO.: US 1993-131898 19931005 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1992-869053, filed on 14 Apr 1992, now abandoned And a continuation-in-part of Ser.

No. US 1988-172152, filed on 23 Mar 1988, now abandoned

which is a continuation-in-part of Ser. No. US

1985-780925, filed on 27 Sep 1985, now abandoned, said Ser. No. US -869053 which is a continuation of Ser. No. US 1990-604607, filed on 26 Oct 1990, now abandoned which is a division of Ser. No. US 1985-806263, filed

on 6 Dec 1985, now patented, Pat. No. US 4981790

NUMBER DATE

PRIORITY INFORMATION: CA 1985-482374 19850524

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fleisher, Mindy ASSISTANT EXAMINER: Railey, II, Johnny F.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein,

Roberts & Cushman, LLP

NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 855

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 2 USPATFULL on STN

TI Assay methods for tat cell lines

AB Assays screened for compounds that inhibit tat transactivation of the HIV (HTLV-III) LTR are taught. The assay involves tranfecting a cell line containing the tat gene by a vector containing a gene under the control of an HIV-1 LTR, adding the compound to be screened and determining the effect of the compound by looking at the effect of tat as measured by the expression of the gene under the control of the HIV LTR.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104559 USPATFULL

TITLE: Assay methods for tat cell lines

INVENTOR(S): Haseltine, William Alan, Cambridge, MA,

United States

Rosen, Craig A., Brookline, MA, United States

Sodroski, Joseph Gerald, Cambridge, MA, United States

Goh, Wei Chun, Somerville, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5800986 19980901 APPLICATION INFO.: US 1995-456346 19950601

APPLICATION INFO.: US 1995-456346 19950601 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1994-213368, filed on 14 Mar

1994, now abandoned which is a continuation of Ser. No. US 1992-869053, filed on 14 Apr 1992, now abandoned which is a continuation of Ser. No. US 1990-604607, filed on 26 Oct 1990, now abandoned which is a division of Ser. No. US 1985-806263, filed on 6 Dec 1985, now

patented, Pat. No. US 4981790 which is a

continuation-in-part of Ser. No. US 1984-614297, filed

on 25 May 1984, now patented, Pat. No. US 4738922

NUMBER DATE

PRIORITY INFORMATION: CA 1985-432374 19850524

WO 1985-US985 19850524

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Elliott, George C. ASSISTANT EXAMINER: McKelvey, Terry A.

LEGAL REPRESENTATIVE: Conlin, David C., Eisenstein, Ronald I.Dike, Bronstein,

Roberts & Cushman, LLP

NUMBER OF CLAIMS: 8 EXEMPLARY CLAIM: 8

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 871

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> dhis

DHIS IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d his

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E ROSEN, C/AU

E HASELTINE, W/AU

L1 2 S E2 L2 78 S E1

L3 4 S FUSION ALBUMIN PROTEIN

=> s 12 and 13

L4 0 L2 AND L3

=> d l3 ti abs ibib tot

L3 ANSWER 1 OF 4 USPATFULL on STN

TI Compositions and methods for the therapy and diagnosis of colon cancer

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions

thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2003:237907 USPATFULL ACCESSION NUMBER:

Compositions and methods for the therapy and diagnosis TITLE:

of colon cancer

King, Gordon E., Shoreline, WA, UNITED STATES INVENTOR(S):

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES Secrist, Heather, Seattle, WA, UNITED STATES

Jiang, Yuqiu, Kent, WA, UNITED STATES

Corixa Corporation, Seattle, WA, UNITED STATES, 98104 PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE ______

US 2003166064 A1 20030904 US 2002-99926 A1 20020314 (10) PATENT INFORMATION: APPLICATION INFO.:

Continuation-in-part of Ser. No. US 2001-33528, filed RELATED APPLN. INFO.: on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING

> DATE NUMBER ______ US 2001-302051P 20010629 (60)

PRIORITY INFORMATION: US 2001-279763P 20010328 (60) US 2000-223283P 20000803 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH

AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 8531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 4 USPATFULL on STN

Compositions and methods for the therapy and diagnosis of pancreatic ΤI

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:106233 USPATFULL

Compositions and methods for the therapy and diagnosis TITLE:

of pancreatic cancer

INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES

Kalos, Michael D., Seattle, WA, UNITED STATES Lodes, Michael J., Seattle, WA, UNITED STATES Persing, David H., Redmond, WA, UNITED STATES Hepler, William T., Seattle, WA, UNITED STATES

Jiang, Yuqiu, Kent, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104

(U.S. corporation)

NUMBER

PRIORITY INFORMATION: US 2001-333626P 20011127 (60) US 2001-305484P 20010712 (60)

US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)

US 2001-265682P 20010131 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH

AVE, SUITE 6300, SEATTLE, WA, 98104-7092

DATE

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM: 1 LINE COUNT: 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 4 USPATFULL on STN

Compositions and methods for the therapy and diagnosis of colon cancer Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:272801 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis

of colon cancer

INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES Chenault, Ruth A., Seattle, WA, UNITED STATES

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104

(U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH

AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1 LINE COUNT: 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 4 USPATFULL on STN

Compositions and methods for the therapy and diagnosis of ovarian cancer Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:243051 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis

of ovarian cancer

INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES

Jones, Robert, Seattle, WA, UNITED STATES

Harlocker, Susan L., Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104

(U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2000-207484P 20000526 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH

AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 12 and albumin protein

L5 1 L2 AND ALBUMIN PROTEIN

=> d l5 ti abs ibib tot

L5 ANSWER 1 OF 1 USPATFULL on STN

TI Albumin fusion proteins

The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:181414 USPATFULL

TITLE: Albumin fusion proteins

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES

Haseltine, William A., Washington, DC, UNITED

STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-256931P 20001221 (60)

US 2000-199384P 20000425 (60) US 2000-229358P 20000412 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 29 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 20 Drawing Page(s)

LINE COUNT: 15235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS, BIOSIS, BIOBUSINESS' ENTERED AT 12:37:37 ON 27 OCT 2003

E ROSEN, C/AU
E HASELTINE, W/AU

L1 2 S E2 L2 78 S E1

L3 4 S FUSION ALBUMIN PROTEIN

L4 0 S L2 AND L3

L5 1 S L2 AND ALBUMIN PROTEIN

=> d 12 ti abs ibib tot

L2 ANSWER 1 OF 78 USPATFULL on STN

TI Human DNA mismatch repair proteins

The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:228227 USPATFULL

TITLE: Human DNA mismatch repair proteins

INVENTOR(S): Haseltine, William A., Washington, DC, United

States

Ruben, Steven M., Brookeville, MD, United States Wei, Ying-Fei, Berkeley, CA, United States Adams, Mark D., Rockville, MD, United States

Fleischmann, Robert D., Gaithersburg, MD, United States

Fraser, Claire M., Potomac, MD, United States

Fuldner, Rebecca A., Barnesville, MD, United States

Kirkness, Ewen F., Olney, MD, United States

Rosen, Craig A., Laytonsville, MD, United States Vogelstein, Bert, Baltimore, MD, United States Kinzler, Kenneth W., Bel Air, MD, United States Nicolaides, Nicholas C., Boothwyn, PA, United States Papadopoulos, Nickolas, Brookline, MA, United States Human Genome Sciences, Inc., Rockville, MD, United

PATENT ASSIGNEE(S): Human Genome Sciences, In States (U.S. corporation)

The Johns Hopkins University, Baltimore, MD, United

States (U.S. corporation)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-294312, filed

on 23 Aug 1994, now patented, Pat. No. US 6380369 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994 Continuation-in-part of Ser. No. US

1994-187757, filed on 27 Jan 1994

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Horlick, Kenneth R.

LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.

NUMBER OF CLAIMS: 13 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 27 Drawing Figure(s); 26 Drawing Page(s)

LINE COUNT: 2655

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 78 USPATFULL on STN

TI Albumin fusion proteins

The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:181414 USPATFULL TITLE: Albumin fusion proteins

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES

Haseltine, William A., Washington, DC, UNITED

STATES

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 29

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 20 Drawing Page(s)

LINE COUNT: 15235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 78 USPATFULL on STN

TI HUMAN DNA MISMATCH REPAIR PROTEIN

AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:127014 USPATFULL

TITLE: HUMAN DNA MISMATCH REPAIR PROTEIN

INVENTOR(S): HASELTINE, WILLIAM A., WASHINGTON, DC, UNITED

STATES

RUBEN, STEVEN, OLNEY, MD, UNITED STATES
WEI, YING-FEI, DARNESTOWN, MD, UNITED STATES
ADAMS, MARK D., NORTH POTOMAC, MD, UNITED STATES
FLEISCHMANN, ROBERT D., WASHINGTON, DC, UNITED STATES
FRASER, CLAIRE M., QUEENSTOWN, MD, UNITED STATES
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES
FULDNER, REBECCA A., BARNESVILLE, MD, UNITED STATES
KIRKNESS, EWEN F., WASHINGTON, DC, UNITED STATES

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-187757, filed

on 27 Jan 1994, GRANTED, Pat. No. US 6482606

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 1017

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 4 OF 78 USPATFULL on STN

TI Human DNA mismatch repair proteins

The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a prodeudre for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:37532 USPATFULL

TITLE: Human DNA mismatch repair proteins

INVENTOR(S): Haseltine, William A., Washington, DC, UNITED

STATES

Ruben, Steven M., Olney, MD, UNITED STATES Wei, Ying-Fei, Berkeley, CA, UNITED STATES Adams, Mark D., Rockville, MD, UNITED STATES Fleischmann, Robert D., Gaithersburg, MD, UNITED STATES Fraser, Claire M., Potomac, MD, UNITED STATES Fuldner, Rebecca A., Barnesville, MD, UNITED STATES Kirkness, Ewen F., Olney, MD, UNITED STATES Rosen, Craig A., Laytonsville, MD, UNITED STATES

Human Genome Sciences, Inc., Rockville, MD (U.S.

corporation)

NUMBER KIND DATE
US 2003027177 A1 20030206

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

PATENT ASSIGNEE(S):

US 2003027177 A1 20030206 US 2002-79429 A1 20020222 (10)

Division of Ser. No. US 1995-468024, filed on 6 Jun 1995, PENDING Continuation-in-part of Ser. No. WO 1995-US1035, filed on 25 Jan 1995, UNKNOWN

Continuation-in-part of Ser. No. US 1994-294312, filed

on 23 Aug 1994, GRANTED, Pat. No. US 6380369

Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Division of Ser. No. US 1995-465679, filed on 6 Jun 1995, PENDING Continuation-in-part of Ser. No. US

1994-294312, filed on 23 Aug 1994, GRANTED, Pat. No. US 6380369 Continuation-in-part of Ser. No. US

1994-210143, filed on 16 Mar 1994, PENDING

Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994, GRANTED, Pat. No. US 6380369 Continuation-in-part of Ser. No. US

1994-210143, filed on 16 Mar 1994, PENDING

Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994, PENDING Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, PENDING Continuation-in-part of Ser.

No. US 1994-187757, filed on 27 Jan 1994, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1

INVENTOR(S):

NUMBER OF DRAWINGS: 26 Drawing Page(s)

LINE COUNT: 2724

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 78 USPATFULL on STN

TI Human DNA mismatch repair polynucleotides

The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:303858 USPATFULL

TITLE: Human DNA mismatch repair polynucleotides

Adams, Mark D., North Potomac, MD, United States Fleischmann, Robert D., Washington, DC, United States Fraser, Claire M., Queenstown, MD, United States Fuldner, Rebecca A., Barnesville, MD, United States Kirkness, Ewen F., Washington, DC, United States Haseltine, William A., Washington, DC, United

States

Rosen, Craig A., Laytonsville, MD, United States

Ruben, Steve, Olney, MD, United States

Wei, Ying-Fei, Darnestown, MD, United States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6482606 B1 20021119 APPLICATION INFO.: US 1994-187757 19940127 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: McKelvey, Terry

LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1290

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 78 USPATFULL on STN

TI Human DNA Ligase IV

AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:246554 USPATFULL TITLE: Human DNA Ligase IV

INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States

Haseltine, William A., Washington, DC, United

States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE
US 6455274 B1 20020924

PATENT INFORMATION: US 6455274 B1 20020924 APPLICATION INFO.: US 1995-461562 19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1994-US12922, filed

on 8 Nov 1994

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Pak, Michael

LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.

NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 1792

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L2 ANSWER 7 OF 78 USPATFULL on STN
- TI Human DNA Ligase IV
- AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against

such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:243145 USPATFULL TITLE: Human DNA Ligase IV

INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, UNITED STATES

Haseltine, William A., Washington, DC, UNITED

STATES

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, UNITED

STATES, 20850 (U.S. corporation)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-461562, filed on 5 Jun

1995, PENDING Continuation-in-part of Ser. No. WO

1994-US12922, filed on 8 Nov 1994, UNKNOWN

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 15 Drawing Page(s)

LINE COUNT: 1669

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 78 USPATFULL on STN

TI Human genes, sequences and expression products-16

AB A DNA sequence of SEQ ID NOS:1-12483. An isolated DNA sequence containing the coding region of a human gene and a DNA sequence identified in SEQ ID NOS:1-12483. An isolated DNA sequence containing the coding region of a human gene that contains a DNA sequence present in ATCC Deposit No. 75916. A DNA sequence hybridizable with a DNA sequence of SEQ ID NOS:1-12483 and isolatable from other DNA in ATCC Deposit No. 75916. Expression vectors containing any of the above. Proteins expressed from any of the above.

ACCESSION NUMBER: 2002:206157 USPATFULL

TITLE: Human genes, sequences and expression products-16 INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Dillon, Patrick J., Gaithersburg, MD, UNITED STATES

Li, Haodong, Gaithersburg, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED

STATES

NUMBER KIND DATE

US 2002110850 A1 20020815
US 2001-783590 A1 20010215 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-420856, filed on 12

Apr 1995, ABANDONED

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 2546

PATENT INFORMATION: APPLICATION INFO.:

L2 ANSWER 9 OF 78 USPATFULL on STN

TI Human DNA mismatch repair proteins

The invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:168073 USPATFULL

TITLE: Human DNA mismatch repair proteins

INVENTOR(S): Haseltine, William A., Washington, DC, United

States

Ruben, Steven M., Olney, MD, United States Wei, Ying-Fei, Darnestown, MD, United States Adams, Mark D., North Potomac, MD, United States

Fleischmann, Robert D., Gaithersburg, MD, United States

Fraser, Claire M., Potomac, MD, United States Fuldner, Rebecca A., Barnesville, MD, United States

Kirkness, Ewen F., Olney, MD, United States Rosen, Craig A., Laytonsville, MD, United States Human Genome Sciences, Inc., Rockville, MD, United

PATENT ASSIGNEE(S): Human Genome Sciences, In States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6416984 B1 20020709 APPLICATION INFO.: US 1995-468024 19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1995-US1035, filed

on 25 Jan 1995 Continuation-in-part of Ser. No. US 1994-294312, filed on 23 Aug 1994 Continuation-in-part of Ser. No. US 1994-210143, filed on 16 Mar 1994

Continuation-in-part of Ser. No. US 1994-187757, filed

on 27 Jan 1994

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Nashed, Nashaat T.

LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.

NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 28 Drawing Figure(s); 26 Drawing Page(s)

LINE COUNT: 2754

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 78 USPATFULL on STN

TI Human DNA mismatch repair proteins

The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins which may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:95941 USPATFULL

TITLE: Human DNA mismatch repair proteins

INVENTOR(S): Adams, Mark D., North Potomac, MD, United States

Fleischmann, Robert D., Gaithersburg, MD, United States

Fraser, Claire M., Potomac, MD, United States

Fuldner, Rebecca A., Barnesville, MD, United States

Kirkness, Ewen F., Olney, MD, United States

Haseltine, William A., Washington, DC, United

States

Rosen, Craig A., Laytonsville, MD, United States

Ruben, Steve, Olney, MD, United States Wei, Ying-Fei, Darnestown, MD, United States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6380369 B1 20020430 APPLICATION INFO.: US 1994-294312 19940823 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-210143, filed

on 16 Mar 1994 Continuation-in-part of Ser. No. US

1994-187757, filed on 27 Jan 1994

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Campbell, Eggerton A.

LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.

NUMBER OF CLAIMS: 62 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 28 Drawing Figure(s); 26 Drawing Page(s)

LINE COUNT: 1500

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 78 USPATFULL on STN

TI Method of intracellular binding target molecules

The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:226439 USPATFULL

TITLE: Method of intracellular binding target molecules INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States Haseltine, William A., Cambridge, MA, United

States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Inc., Boston, MA, United

States (U.S. corporation)

PATENT INFORMATION: US 6329173 B1 20011211
APPLICATION INFO.: US 2000-556111 20000421 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-287145, filed on 6 Apr 1999, now patented, Pat. No. US 6072036 Division of Ser. No. US 1995-438190, filed on 9 May 1995, now patented, Pat. No. US 5965371 Continuation of Ser. No.

patented, Pat. No. US 5965371 Continuation of Ser. No. US 1993-45274, filed on 31 Mar 1993, now abandoned Continuation-in-part of Ser. No. US 1992-916939, filed

on 17 Jul 1992, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Stucker, Jeffrey LEGAL REPRESENTATIVE: Nixon Peabody LLP

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 31 Drawing Figure(s); 17 Drawing Page(s)

LINE COUNT: 2470

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 78 USPATFULL on STN

TI Human DNA ligase III

AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:205585 USPATFULL TITLE: Human DNA ligase III

INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, United States
Yu, Guo-Liang, Berkeley, CA, United States

Haseltine, William A., Washington, DC, United

States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, 20850

(non-U.S. corporation)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-54775, filed on 3 Apr

1998, GRANTED, Pat. No. US 6284504 Division of Ser. No. US 1995-464402, filed on 5 Jun 1995, GRANTED, Pat. No.

US 5858705 Continuation-in-part of Ser. No. WO 1995-US3939, filed on 31 Mar 1995, UNKNOWN

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 49 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 1904

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 78 USPATFULL on STN

TI Human DNA ligase III

AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:147715 USPATFULL
TITLE: Human DNA ligase III

INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States

Yu, Guo-Liang, Darnestown, MD, United States Haseltine, William A., NW. Washington, DC,

United States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6284504 B1 20010904 APPLICATION INFO.: US 1998-54775 19980403 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-464402, filed on 5 Jun

1995, now patented, Pat. No. US 5858705

Continuation-in-part of Ser. No. WO 1995-US3939, filed

on 31 Mar 1995

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Achutamurthy, Ponnathapu

ASSISTANT EXAMINER: Tung, Peter P.

LEGAL REPRESENTATIVE: Human Genome Sciences Inc.

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)

LINE COUNT: 1458

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 78 USPATFULL on STN

TI Method of intracellular binding of target molecules

The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:70964 USPATFULL

TITLE: Method of intracellular binding of target molecules INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States

Haseltine, William A., Cambridge, MA, United

States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Inc., Boston, MA, United

States (U.S. corporation)

NUMBER KIND DATE
-----US 6072036 20000606
US 1999-287145 19990406 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-438190, filed on 9 May 1995, now patented, Pat. No. US 5965371 which is a

continuation of Ser. No. US 1993-45274, filed on 31 Mar 1993 which is a continuation-in-part of Ser. No. US

1992-916939, filed on 17 Jul 1992

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Stucker, Jeffrey

LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Resnick, David S.Nixon Peabody

LLP

NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1

PATENT INFORMATION: APPLICATION INFO.:

NUMBER OF DRAWINGS: 19 Drawing Figure(s); 17 Drawing Page(s)

LINE COUNT: 2773

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 78 USPATFULL on STN

TI Vector comprising a replication competent HIV-1 provirus and a heterologous gene

AB A vector comprising an HIV segment and a heterologous gene segment,

which produces a replication competent and an infective HIV virus is disclosed. When the heterologous gene is a marker gene, the spread of the virus can be observed in both in vitro and in vivo systems. The use of this vector in establishing methods for screening anti-viral compounds is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2000:27798 USPATFULL ACCESSION NUMBER:

Vector comprising a replication competent HIV-1 TITLE:

provirus and a heterologous gene

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

States

Terwilliger, Ernest, Boston, MA, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE ------

US 6033902 20000307 US 1992-987572 19921208 (7) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 1988-249918, filed on 27

Sep 1988, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Railey, II, Johnny F. PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Resnick, David S., Peabody LLP,

Nixon

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 737

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 16 OF 78 USPATFULL on STN L2

ΤI Vectors containing HIV packaging sequences, packaging defective HIV

vectors, and uses thereof

Packaging defective and packaging proficient HIV vectors are disclosed. AB These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:141683 USPATFULL

TITLE: Vectors containing HIV packaging sequences, packaging

defective HIV vectors, and uses thereof

Sodroski, Joseph G., Medford, MA, United States INVENTOR(S):

Haseltine, William A., Cambridge, MA, United

States

Poznansky, Mark, Cambridge, MA, United States

Lever, Andrew, Pinner, United Kingdom

Dana-Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE

US 5981276 US 1997-915429 PATENT INFORMATION: 19991109 APPLICATION INFO.: 19970820 (8)

Division of Ser. No. US 1993-152902, filed on 15 Nov RELATED APPLN. INFO.:

> 1993, now patented, Pat. No. US 5665577 which is a continuation of Ser. No. US 1992-827588, filed on 29 Jan 1992, now abandoned which is a continuation of Ser. No. US 1990-540746, filed on 20 Jun 1990, now abandoned

Utility DOCUMENT TYPE: Granted FILE SEGMENT:

Railey, II, Johnny F. PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Eisenstein, Ronald I., Resnick, David S.

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: 7

14 Drawing Figure(s); 7 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1009

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 17 OF 78 USPATFULL on STN L_2

ΤI Method of intracellular binding of target molecules

The present invention relates to a method by which one can target an AB undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1999:124707 USPATFULL

ACCESSION NUMBER:

Method of intracellular binding of target molecules TITLE: INVENTOR(S): Marasco, Wayne A., Wellesley, MA, United States

Haseltine, William A., Cambridge, MA, United

States

Dana-Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5965371 US 5965371 19991012 US 1995-438190 19950509 (8) 19991012 APPLICATION INFO.:

Continuation of Ser. No. US 1993-45274, filed on 31 Mar RELATED APPLN. INFO.:

1993 which is a continuation-in-part of Ser. No. US 1992-916939, filed on 17 Jul 1992, now abandoned

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Stucker, Jeffrey PRIMARY EXAMINER:

Eisenstein, Ronald I., Conlin, David G., Resnick, David LEGAL REPRESENTATIVE:

S.

NUMBER OF CLAIMS: 101 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 33 Drawing Figure(s); 17 Drawing Page(s)

LINE COUNT: 3086

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 78 USPATFULL on STN

Polynucleotides encoding human DNA ligase III and methods of using these TI polynucleotides

A human DNA Ligase III polypeptide and DNA (RNA) encoding such AR polypeptide and a procedure for producing such polypeptide by recombinant techniques are disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 1999:4370 USPATFULL

TITLE: Polynucleotides encoding human DNA ligase III and methods of using these polynucleotides

INVENTOR(S): Wei, Ying-Fei, Darnestown, MD, United States
Yu, Guo-Liang, Darnestown, MD, United States

Has ltine, William A., Washington, DC, United

States

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5858705 19990112
APPLICATION INFO.: US 1995-464402 19950605 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Walsh, Stephen ASSISTANT EXAMINER: Lathrop, Brian

LEGAL REPRESENTATIVE: Olstein, Elliot M., Mullins, J. G.

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 1615

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 19 OF 78 USPATFULL on STN

TI Immunogenic peptides, antibodies and uses thereof relating to CD4

receptor binding

AB Immunogenic peptides containing amino acid residues which define a binding site to a CD4 receptor are disclosed. Antibodies to these peptides are also disclosed. Methods of reducing the ability of a gpl20 env protein to bind to CD4 are also disclosed. Methods of treatment and prophylaxis using these antibodies and peptides are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:4039 USPATFULL

TITLE: Immunogenic peptides, antibodies and uses thereof

relating to CD4 receptor binding

INVENTOR(S): Sodroski, Joseph G., Medford, MA, United States

Haseltine, William A., Boston, MA, United

States

Olshevsky, Udy, Remath-OAN, Israel Helseth, Eirik, Trondheim, Norway

Furman, Craig D., Nashua, NH, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5858366 19990112
APPLICATION INFO.: US 1993-135312 19931012 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-669072, filed on 14

Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-524632, filed on 16 May 1990, now

abandoned Utility

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Smith, Lynette F.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein,

Roberts & Cushman, LLP

NUMBER OF CLAIMS: 8 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1226

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 20 OF 78 USPATFULL on STN L2

Reactive neutralizing human anti-GP120 recombinant antibody, DNA coding ТI

the same and use thereof

The present invention is directed to a recombinant human monoclonal ΔR antibody which binds to a discontinuous epitope on the HIV qp120 envelope glycoprotien, blocks the binding of gp120 to the CD4 receptor, and neutralizes a broad range of HIV isolates. The present invention also provides the primary nucleotide and deduced amino acid sequences of the rearranged heavy and light chains of the recombinant monoclonal antibody of the present invention, and a method of screening for antibodies which block binding of envelope glycoprotein to the CD4 receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:160114 USPATFULL

Reactive neutralizing human anti-GP120 recombinant TITLE:

antibody, DNA coding the same and use thereof

Sodroski, Joseph G., Medford, MA, United States INVENTOR(S):

Marasco, Wayne A., Wellesley, MA, United States Posner, Marshall R., Dedham, MA, United States Haseltine, William A., Cambridge, MA, United

States

Dana-Farber Cancer Insitute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

New England Deaconess Hospital Corp., Dedham, MA,

United States (U.S. corporation)

NUMBER KIND DATE US 5852186 19981222

US 1995-480774 APPLICATION INFO.: 19950607

Division of Ser. No. US 1995-400674, filed on 8 Mar RELATED APPLN. INFO.:

1995, now abandoned which is a continuation of Ser. No.

US 1991-804652, filed on 10 Dec 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Budens, Robert D. PRIMARY EXAMINER:

Conlin, David G., Resnick, David S., Eisenstein, Ronald LEGAL REPRESENTATIVE:

I.

NUMBER OF CLAIMS: 1,2 EXEMPLARY CLAIM:

AB

PATENT INFORMATION:

22 Drawing Figure(s); 16 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 2191

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 21 OF 78 USPATFULL on STN L2

Method of intracellular binding of target molecules TI

> The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:159761 USPATFULL

Method of intracellular binding of target molecules TITLE: Marasco, Wayne A., Wellesley, MA, United States INVENTOR(S):

Has ltine, William A., Rockville, MD, United

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

KIND DATE NUMBER ------US 5851829 19981222 WO 9402610 19940203 US 1995-373190 19950330 (8) PATENT INFORMATION: APPLICATION INFO.: WO 1993-US6735 19930716

19950330 PCT 371 date 19950330 PCT 102(e) date

Utility DOCUMENT TYPE: Granted FILE SEGMENT:

FILE SEGMENT: Granted
PRIMARY EXAMINER: Stucker, Jeffrey

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I., Resnick, David

s.

62 NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 34 Drawing Figure(s); 19 Drawing Page(s)

3209 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 22 OF 78 USPATFULL on STN

Immunogenic peptides, antibodies and uses thereof relating to CD4 ΤI

receptor binding

AB Immunogenic peptides containing amino acid residues which define a binding site to a CD4 receptor are disclosed. Antibodies to these peptides are also disclosed. Methods of reducing the ability of a gp120 env protein to bind to CD4 are also disclosed. Methods of treatment and prophylaxis using these antibodies and peptides are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:122077 USPATFULL

Immunogenic peptides, antibodies and uses thereof TITLE:

relating to CD4 receptor binding

Sodroski, Joseph G., Medford, MA, United States INVENTOR(S):

Haseltine, William A., Canbridge, MA, United

States

Furman, Craig D., Nashua, NH, United States

Olshevsky, Udy, Remath-Oan, Israel Helseth, Eirik, Trondheim, Norway

Wyatt, Richard, Tewksbury, MA, United States Thali, Markus, Brookline, MA, United States

Dana-Farber Cancer Instistute, Boston, MA, United PATENT ASSIGNEE(S):

States (U.S. corporation)

NUMBER KIND DATE US 5817316 US 1992-858165 PATENT INFORMATION: 19981006 APPLICATION INFO.: 19920326 (7)

Continuation-in-part of Ser. No. US 1991-669072, filed RELATED APPLN. INFO.:

on 14 Mar 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1990-524632, filed

on 16 May 1990, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Smith, Lynette F.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein,

Roberts & Cushman

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1354

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 23 OF 78 USPATFULL on STN L2

Assays for factors affecting circularization of DNA, assays for factors TI

affecting DNA integration, factors, and uses thereof

An assay for factors that affect integration of DNA into target DNA is AB disclosed. Assays for methods of screening for factors which effect viral DNA circularization either by homologous recombination, end-to-end ligation, or autointegration, are also disclosed. A method for screening for factors which will enhance circularization rather than integration by testing cellular cytoplasmic fluid under conditions which permit circularization in the fluid is also described. Factors which effect integration and circularization are disclosed. Therapeutic methods for retarding viral infection are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:61388 USPATFULL

Assays for factors affecting circularization of DNA, TITLE:

assays for factors affecting DNA integration, factors,

and uses thereof

Haseltine, William A., Cambridge, MA, United INVENTOR(S):

States

Farnet, Christopher M., Cambridge, MA, United States

Dana Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE

______ US 5759768 19980602 US 1995-425726 19950420

PATENT INFORMATION: APPLICATION INFO.: (8)

Continuation of Ser. No. US 1991-703180, filed on 17 RELATED APPLN. INFO.:

May 1991, now abandoned

Utility DOCUMENT TYPE: Granted FILE SEGMENT: Degen, Nancy PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.Dike, Bronstein,

Roberts & Cushman, LLP

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM:

40 Drawing Figure(s); 25 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1672

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 24 OF 78 USPATFULL on STN L2

Vectors containing HIV packaging sequences, packaging defective HIV TT

vectors, and uses thereof

Packaging defective and packaging proficient HIV vectors are disclosed. AB These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:81129 USPATFULL

TITLE: Vectors containing HIV packaging sequences, packaging

defective HIV vectors, and uses thereof

Sodroski, Joseph G., Medford, MA, United States INVENTOR(S):

Haseltine, William A., Cambridge, MA, United

States

Poznansky, Mark, Cambridge, MA, United States Lever, Andrew, Pinner Middlesex, England

Gottlinger, Heinrich, Munich, Germany, Federal Republic

of

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5665577 19970909 APPLICATION INFO.: US 1993-152902 19931115 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-827588, filed on 29

Jan 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-540746, filed on 20 Jun 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-307664, filed on 6 Feb 1989, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fleisher, Mindy

ASSISTANT EXAMINER: Railey, II, Johnny F.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: 72 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1156

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 25 OF 78 USPATFULL on STN

TI Vectors expressing hybrid viruses, methods of use and novel assays

AB A vector which can be used to establish a hybrid SIV/HIV-1 virus is
described. This virus can be used to infect an animal such as a monkey
to establish an animal model for in vivo testing. This animal model can
be used for purposes such as screening for therapeutics, adjuvants and

vaccines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:68366 USPATFULL

TITLE: Vectors expressing hybrid viruses, methods of use and

novel assays

INVENTOR(S): Sodroski, Joseph, Medford, MA, United States

Haseltine, William A., Cambridge, MA, United

States

Letvin, Norman, Newton, MA, United States

Li, John, Boston, MA, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5654195 19970805 APPLICATION INFO.: US 1994-268799 19940701 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-887505, filed on 22

May 1992, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Guzo, David

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 1388

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 26 OF 78 USPATFULL on STN

TI YC1 gene

AB Isolated and purified YC1 genes and proteins are disclosed. The protein binds to a site in the HIV-LTR, the NRE-1 site, and can inhibit the expression of a gene operably linked to the HIV-1 LTR. The use of the protein and gene are discussed. Repressible and inducible expression systems using the YC1 gene are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:66033 USPATFULL

TITLE: YC1 gene

INVENTOR(S): Lu, Yinchen, Wellesley, MA, United States

Haseltine, William A., Cambridge, MA, United

States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5652144 19970729 APPLICATION INFO.: US 1992-973431 19921110 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Guzo, David

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1256

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 27 OF 78 USPATFULL on STN

TI Cis-acting repression sequences, cis-acting antirepression sequences,

vectors, methods of preparation and use

AB Cis-acting repression sequences which are able to provide a cis-acting inhibitory effect on the expression of a gene when placed downstream of the gene in its untranslated message are dislosed. Cis-acting anti-repression sequences which can relieve the cis-acting repression in the presence of the art gene product are also disclosed. These sequences correspond to a sufficient number of nucleotides from the HIV-I, HIV-2,

STLV-3 or HTLV-IV genomes to provide the repression or anti-repression effects. The use of the sequences in vectors and systems to control the

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:14591 USPATFULL

TITLE: Cis-acting repression sequences, cis-acting

expression of a desired gene product is also described.

antirepression sequences, vectors, methods of

preparation and use

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

States

Rosen, Craig A., Glen Ridge, NJ, United States Sodroski, Joseph G., Cambridge, MA, United States Terwilliger, Ernest, Boston, MA, United States

Goh, Wei C., Stanford, CA, United States

PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE
PATENT INFORMATION: US 5604114 19970218

PATENT INFORMATION: US 5604114 19970218
APPLICATION INFO.: US 1993-41887 19930402 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-847854, filed on 9 Mar

1992, now abandoned which is a continuation of Ser. No. US 1990-591667, filed on 27 Sep 1990, now abandoned which is a continuation of Ser. No. US 1987-56620, filed on 29 May 1987, now abandoned which is a

continuation-in-part of Ser. No. US 1986-865151, filed on 20 May 1986, now patented, Pat. No. US 4935372

On 20 May 1986, now patented, Pat. No. US 49353
DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

Elliott, George C. PRIMARY EXAMINER: ASSISTANT EXAMINER: Railey, II, Johnny F.

Conlin, David G., Eisenstein, Ronald I. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM:

20 Drawing Figure(s); 11 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 28 OF 78 USPATFULL on STN L2 H. saimiri-HTLV-X region vector TI

An H. saimiri-HTLV-1 or 2 X region vector is disclosed. This vector can AB be used to establish continuous cell lines of difficult to grow cells, such as human T-cells. It can also be used to obtain certain cell products and in methods for screening new compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

95:52244 USPATFULL ACCESSION NUMBER:

H. saimiri-HTLV-X region vector TITLE:

Haseltine, William A., Cambridge, MA, United INVENTOR(S):

States

McGuire, Kathleen, Jamaica Plain, MA, United States

Dokhelar, Marie-Christine, Paris, France

Grassmann, Ralph, Erlangen, Germany, Federal Republic

Fleckenstein, Bernard, Weisenthau, Germany, Federal

Republic of

Muller-Fleckenstein, Ingrid, Weisenthau, Germany,

Federal Republic of

Dana Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

Behringwerke Aktiengesellschaft, Frankfurt, Germany,

Federal Republic of (non-U.S. corporation)

NUMBER KIND DATE US 1992-976661 Continuati 19950613 19921116 (7)

Continuation of Ser. No. US 1992-816774, filed on 2 Jan RELATED APPLN. INFO.: 1992, now abandoned which is a continuation of Ser. No.

US 1988-254416, filed on 6 Oct 1988, now abandoned

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Stone, Jacqueline PRIMARY EXAMINER: ASSISTANT EXAMINER:

Railey, II, Johnny F.
Conlin, David G., Eisenstein, Ronald I. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 16 EXEMPLARY CLAIM: 1

PATENT INFORMATION:

APPLICATION INFO.:

11 Drawing Figure(s); 6 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 777

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 29 OF 78 USPATFULL on STN L_2

Art (rev) protein of human T-cell leukemia virus TI

AB A gene and gene product that regulates the expression of the capsidal envelope genes of HTLV-III/LAV and that can be used to regulate the expression of heterologous (non-viral) genes as well is disclosed. This art gene consists of two exons and can be used in creating nucleotide segments, vectors and cell lines. A new method for screening for compounds that inhibit the replication of HTLV-III is also described and comprises:

(1) transfecting a T-cell line with the HTLV-III art and env genes;

- (2) thereafter, adding a preselected compound to the transformed cell line in increasing concentrations; and
- (3) determining whether the compound effects the art function without being toxic to the cell.

An additional parameter to use in diagnosis of AIDS disease is also described. The use of the art gene and gene product in AIDS therapy is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 94:51511 USPATFULL

Art (rev) protein of human T-cell leukemia virus TITLE:

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

States

Rosen, Craig A., Brookline, MA, United States Sodroski, Joseph G., Cambridge, MA, United States

Goh, Wei C., Somerville, MA, United States

Dana Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE ______

PATENT INFORMATION: US 5321124 19940614 US 1992-995948 19921218 (7) APPLICATION INFO.:

Continuation of Ser. No. US 1990-538189, filed on 14 RELATED APPLN. INFO.:

Jun 1990, now abandoned which is a division of Ser. No. US 1986-865151, filed on 20 May 1986, now patented,

Pat. No. US 4935372

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Low, Christopher S. F.
LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

17 Drawing Figure(s); 11 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1062

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 30 OF 78 USPATFULL on STN L2

Sequences containing the vpu gene and vectors therefore methods of ΤI

preparation and use

DNA segments encoding the vpu gene and a vector encoding the vpu gene AB are disclosed. These sequences containing the vpu gene can be used to express a protein that has antigenic determinants that can be used to screen for people having the HIV-1 virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 94:15664 USPATFULL

ACCESSION NUMBER:

TITLE: Sequences containing the vpu gene and vectors therefore

methods of preparation and use

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

Terwilliger, Ernest, Boston, MA, United States

Cohen, Eric, Brighton, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE ------

PATENT INFORMATION: US 5288640 19940222 US 1991-716131 19910617 (7) APPLICATION INFO.:

Division of Ser. No. US 1988-193321, filed on 12 May RELATED APPLN. INFO.:

1988, now patented, Pat. No. US 5043262

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Nucker, Christine M. ASSISTANT EXAMINER: Barnd, D. L.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

14 Drawing Figure(s); 8 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 493

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 31 OF 78 USPATFULL on STN L2

Expression of human immunodeficiency virus (HIV) reverse transcriptase ΤI This invention describes pHRT25, a plasmid containing a modified pol AB gene of the Human Immunodeficiency Virus Type 1 (HIV-1), formerly HTLV-III, under control of an inducible trp promoter. Methods of expressing reverse transcriptase activity using pHRT25 in E. coli are

described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 93:89562 USPATFULL ACCESSION NUMBER:

TITLE: Expression of human immunodeficiency virus (HIV)

reverse transcriptase

INVENTOR(S): Goff, Stephen P., Tenafly, NJ, United States

Tanese, Naoko, New York, NY, United States Haseltine, William A., Cambridge, MA, United

States

The Trustees of Columbia University in the City of New PATENT ASSIGNEE(S):

> York, New York, NY, United States (U.S. corporation) The Dana Farber Cancer Institute, Boston, MA, United

States (U.S. corporation)

NUMBER KIND ______

US 5256554 PATENT INFORMATION: US 5256554 19931026 US 1991-800682 19911202 APPLICATION INFO.:

Continuation of Ser. No. US 1990-552848, filed on 12 RELATED APPLN. INFO.:

> Jul 1990, now abandoned which is a continuation of Ser. No. US 1986-865156, filed on 20 May 1986, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Schwartz, Richard A. PRIMARY EXAMINER: ASSISTANT EXAMINER: Railey II, Johnny F.

LEGAL REPRESENTATIVE: White, John P.

NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 27 Drawing Figure(s); 26 Drawing Page(s)

LINE COUNT: 462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 32 OF 78 USPATFULL on STN L2

TI Gene expressing VPT protein and vectors expressing this protein AB Viral protein T from Human Immunodeficiency Virus Type 1 (HIV-1) is disclosed. The protein has a molecular weight of approximately 17 kD and is produced by the vpt gene of HIV-1. This protein is antigenic. Vectors capable of expressing the vpt protein are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 93:31326 USPATFULL

Gene expressing VPT protein and vectors expressing this TITLE:

protein

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

Cohen, Eric, Brighton, MA, United States

Dana Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE -----

US 5204258 19930420 US 1989-360847 19890602 (7) PATENT INFORMATION: APPLICATION INFO.:

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: PRIMARY EXAMINER: Schwartz, Richard A. ASSISTANT EXAMINER: Railey, II, Johnny F.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 8 Drawing Page(s)

473 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 33 OF 78 USPATFULL on STN L2

Protein, sequences containing the VPU gene therefore, vectors, methods TI

of preparation and use

A protein having molecular weight of approximately 16 kD which is also AB cleaved into a protein having a molecular weight of 15 kD is disclosed. This protein is referred to as viral protein U and produced by the vpu gene. It is disclosed that this protein has antigenic determinants and can be used to screen for people having the HIV-1 virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 91:68814 USPATFULL

Protein, sequences containing the VPU gene therefore, TITLE:

vectors, methods of preparation and use

INVENTOR (S): Haseltine, William A., Cambridge, MA, United

States

Terwilliger, Ernest, Boston, MA, United States

Cohen, Eric, Brighton, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE -------

US 5043262 19910827 US 1988-193321 19880512 (7) PATENT INFORMATION:
APPLICATION INFO.:

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Schain, Howard E. ASSISTANT EXAMINER: Baker, K. Keith LEGAL REPRESENTATIVE: Conlin, David G.,

Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: 15 1 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 520

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 34 OF 78 USPATFULL on STN L2

ΤI Stable TatIII cell lines, TatIII gene products, and assay methods This invention describes stable tat.sub.III cell lines. It is disclosed ABthat by transfecting a preselected tat.sub.III cell line with a vector containing a sufficient amount of the HTLV-III LTR responsive to tat.sub.III gene products for trans-activation and an enhancer upstream of the tat.sub.III responsive segment, it is possible to express high levels of the tat.sub.III gene products. By including a preselected heterologous gene on this vector, it is also possible to express high levels of a desired gene product. A substantially pure protein

comprising 86 amino acids and having an apparent molecular weight of

about 14,000 dalton and exhibiting trans-activating activity is also disclosed. This protein and polypeptides having trans-activating ability, which is also disclosed, can be used to produce high levels of a desired gene product. A method of detecting the presence of HTLV-III/LAV virus in an individual is also disclosed and comprises the step of:

- (a) incubating whole blood or lymphocytes from the invididual to be tested with tat.sub.III cell lines of the present invention in a culture medium; and
- (b) screening for cytopathic effects on the cells is also disclosed. A method of screening for a compound that inhibits trans-activation of the tat.sub.III gene product is also disclosed and comprises the steps of:
- (1) transacting a tat.sub.III cell line of the present invention with a vector containing a gene that expresses a selectable marker and whose expression is under the control of an HTLV-III LTR;
- (2) transfecting the same type of tat.sub.III cell lines as in step (1) with the selectable gene chosen in step (1) but under the control of a different regulatory sequence;
- (3) thereafter, adding a preselected compound to each of the cell lines in increasing concentrations; and
- (4) measuring the expression of the selectable gene product to determine whether the compound effects the tat.sub.III function without being toxic to the cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 91:1087 USPATFULL

Stable TatIII cell lines, TatIII gene products, and TITLE:

assay methods

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

States

Rosen, Craig A., Brookline, MA, United States Sodroski, Joseph G., Cambridge, MA, United States

Goh, Wei C., Somerville, MA, United States

Dana Farber Cancer Institute, Boston, MA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE -----US 4981790 19910101 US 1985-806263 19851206 (6) PATENT INFORMATION: APPLICATION INFO.:

Continuation-in-part of Ser. No. US 1984-614297, filed RELATED APPLN. INFO.:

on 25 May 1984

NUMBER DATE CA 1985-482374 19850524 WO 1985-US985 19850524 PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Teskin, Robin L. ASSISTANT EXAMINER: Burrous, Beth A.

LEGAL REPRESENTATIVE: Conlin, David G., Eisenstein, Ronald I.

NUMBER OF CLAIMS: 16 EXEMPLARY CLAIM: 1

IINGS: 14 Drawing Figure(s); 7 Drawing Page(s) 847 NUMBER OF DRAWINGS:

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 35 OF 78 USPATFULL on STN

Peptides for the diagnosis of HTLV-III antibodies, their preparation and TI

AB Certain peptide fragments of the human T-cell leukemia (lymphotropic) virus (HTLV-III) are particularly immunoreactive to HTLV-III antibodies, and can therefore be applied to immunodiagnostic tests for the detection of antibodies to HTLV-III.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 88:40574 USPATFULL ACCESSION NUMBER:

TITLE: Peptides for the diagnosis of HTLV-III antibodies,

their preparation and use

Beltz, Gerald A., Lexington, MA, United States INVENTOR(S):

Thorn, Richard M., Milford, MA, United States Marciani, Dante J., Hopkinton, MA, United States

Hung, Chung-Ho, Milford, MA, United States Haseltine, William A., Cambridge, MA, United

States

Cambridge Bioscience Corporation, Hopkinton, MA, United PATENT ASSIGNEE(S):

States (U.S. corporation)

NUMBER KIND DATE ______ US 4753873 US 1986-825597 19880628

19860203 (6) APPLICATION INFO.:

Continuation-in-part of Ser. No. US 1985-819917, filed RELATED APPLN. INFO.:

on 6 Nov 1985

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Nucker, Christine M. PRIMARY EXAMINER:

Saidman, Sterne, Kessler & Goldstein LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM:

PATENT INFORMATION:

21 Drawing Figure(s); 22 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1122

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 36 OF 78 USPATFULL on STN 1.2

Trans-acting transcriptional factors TT

This invention describes the discovery of a novel phenomena in AR retrovirus transcription, namely transcriptional trans-activation. Described herein are novel trans-acting factors which may be employed to enhance the production of heterologous genes. Described is a novel trans-acting directing gene, designated herein as the "luk" gene and the 35,000 to 45,000, more specifically about 42,000 dalton molecular weight protein encoded thereby.

The present invention demonstrates the LTR elements of HTLV can function as transcriptional promoters for heterologous genes on both unintegrated and integrated DNA. In general, the HTLV-1 LTR is a stronger promoter than is the HLTV-II LTR in its requirements for cellular and/or viral trans-acting factors in order to function efficiently. HTLV infection results in the production of trans-acting factors that dramatically increase the rate of HTLV LTR-promoted transcription.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 88:24366 USPATFULL

Trans-acting transcriptional factors TITLE:

INVENTOR(S): Haseltine, William A., Cambridge, MA, United

States

Sodrowski, Joseph G., Cambridge, MA, United States

Rosen, Craig A., Brookline, MA, United States

PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4738922 19880419 APPLICATION INFO.: US 1984-614297 19840525 (6)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Wiseman, Thomas G.

ASSISTANT EXAMINER: Seidman, S.

LEGAL REPRESENTATIVE: Conlin, David G., Linek, Ernest V., Eisenstein, Ronald

I.
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 767

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 37 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Human DNA mismatch repair protein.

AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

ACCESSION NUMBER: 2003:484626 BIOSIS DOCUMENT NUMBER: PREV200300484626

TITLE: Human DNA mismatch repair protein.

AUTHOR(S): Haseltine, William A. [Inventor, Reprint Author];

Ruben, Steven [Inventor]; Wei, Ying-Fei [Inventor]; Adams, Mark D. [Inventor]; Fleischmann, Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Rosen, Craig A. [Inventor];

Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F.

[Inventor]

CORPORATE SOURCE: ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6620619 September 16, 2003

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Sep 16 2003) Vol. 1274, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 15 Oct 2003

Last Updated on STN: 15 Oct 2003

L2 ANSWER 38 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Human DNA mismatch repair proteins.

The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

ACCESSION NUMBER: 2003:435948 BIOSIS DOCUMENT NUMBER: PREV200300435948

TITLE: Human DNA mismatch repair proteins.

AUTHOR(S): Haseltine, William A. [Inventor, Reprint Author];

Ruben, Steven M. [Inventor]; Wei, Ying-Fei [Inventor];

Adams, Mark D. [Inventor]; Fleischmann, Robert D.

[Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; Rosen, Craig

A. [Inventor]; Vogelstein, Bert [Inventor]; Kinzler,

Kenneth W. [Inventor]; Nicolaides, Nicholas C. [Inventor];

Papadopoulos, Nickolas [Inventor]

CORPORATE SOURCE: Brookeville, MD, USA

ASSIGNEE: Human Genome Sciences, Inc.; The Johns Hopkins

University

PATENT INFORMATION: US 6610477 August 26, 2003

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Aug. 26, 2003) Vol. 1273, No. 4. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 17 Sep 2003

Last Updated on STN: 17 Sep 2003

L2 ANSWER 39 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Human DNA mismatch repair polynucleotides.

AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

ACCESSION NUMBER: 2003:53897 BIOSIS DOCUMENT NUMBER: PREV200300053897

TITLE: Human DNA mismatch repair polynucleotides.

AUTHOR(S): Adams, Mark D. [Inventor, Reprint Author]; Fleischmann,

Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; Haseltine, William A. [Inventor];

Rosen, Craig A. [Inventor]; Ruben, Steve [Inventor]; Wei,

Ying-Fei [Inventor]
Queenstown, MD, USA

CORPORATE SOURCE: Queenstown, MD, USA

ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6482606 November 19, 2002

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Nov. 19, 2002) Vol. 1264, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 22 Jan 2003

Last Updated on STN: 22 Jan 2003

L2 ANSWER 40 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Human DNA Ligase IV.

AB A human DNA Ligase IV polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase IV. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase IV genes are also disclosed.

ACCESSION NUMBER: 2002:584537 BIOSIS
DOCUMENT NUMBER: PREV200200584537
TITLE: Human DNA Ligase IV.

AUTHOR(S): Wei, Ying-Fei [Inventor]; Haseltine, William A.

[Inventor]

CORPORATE SOURCE: ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6455274 September 24, 2002

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Sep. 24, 2002) Vol. 1262, No. 4. http://www.uspto.gov/web/menu/patdata.html.e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Nov 2002

Last Updated on STN: 13 Nov 2002

ANSWER 41 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L2

ΤI Human DNA mismatch repair proteins.

AΒ The invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins and a procedure for producing such proteins by recombinant techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for therapeutic and diagnostic treatments of a hereditary susceptibility to cancer.

ACCESSION NUMBER: 2002:447022 BIOSIS DOCUMENT NUMBER: PREV200200447022

TITLE: Human DNA mismatch repair proteins.

AUTHOR(S): Haseltine, William A. [Inventor, Reprint author];

Ruben, Steven M. [Inventor]; Wei, Ying-Fei [Inventor];

Adams, Mark D. [Inventor]; Fleischmann, Robert D.

[Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F. [Inventor]; Rosen, Craig

A. [Inventor]

CORPORATE SOURCE: Washington, DC, USA

ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6416984 July 09, 2002

Official Gazette of the United States Patent and Trademark SOURCE:

> Office Patents, (July 9, 2002) Vol. 1260, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 21 Aug 2002

Last Updated on STN: 21 Aug 2002

ANSWER 42 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L2

ΤI Human DNA mismatch repair proteins.

AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins which may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hMLH1, has been mapped to chromosome 3 while hMLH2 has been mapped to chromosome 2 and hMLH3 has been mapped to chromosome 7. The polynucleotide sequences of the DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

ACCESSION NUMBER: 2002:308881 BIOSIS DOCUMENT NUMBER: PREV200200308881

TITLE: Human DNA mismatch repair proteins.

AUTHOR (S): Adams, Mark D. [Inventor, Reprint author]; Fleischmann,

Robert D. [Inventor]; Fraser, Claire M. [Inventor]; Fuldner, Rebecca A. [Inventor]; Kirkness, Ewen F.

[Inventor]; Haseltine, William A. [Inventor];

Rosen, Craig A. [Inventor]; Ruben, Steve [Inventor]; Wei,

Ying-Fei [Inventor] North Potomac, MD, USA

ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6380369 April 30, 2002

SOURCE: Official Gazette of the United States Patent and Trademark

> Office Patents, (Apr. 30, 2002) Vol. 1257, No. 5. http://www.uspto.gov/web/menu/patdata.html. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

CORPORATE SOURCE:

ENTRY DATE: Entered STN: 22 May 2002

Last Updated on STN: 22 May 2002

L2 ANSWER 43 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Method of intracellular binding target molecules.

AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

ACCESSION NUMBER: 2002:113837 BIOSIS DOCUMENT NUMBER: PREV200200113837

TITLE: Method of intracellular binding target molecules.

AUTHOR(S): Marasco, Wayne A. [Inventor]; Haseltine, William A.

[Inventor]

CORPORATE SOURCE: ASSIGNEE: Dana-Farber Cancer Institute, Inc.

PATENT INFORMATION: US 6329173 December 11, 2001

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Dec. 11, 2001) Vol. 1253, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 30 Jan 2002

Last Updated on STN: 26 Feb 2002

L2 ANSWER 44 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Beyond chicken soup.

ACCESSION NUMBER: 2001:563884 BIOSIS
DOCUMENT NUMBER: PREV200100563884
TITLE: Beyond chicken soup.
AUTHOR(S): Haseltine, William A.

SOURCE: Scientific American, (November, 2001) Vol. 285, No. 5, pp.

56-63. print.

CODEN: SCAMAC. ISSN: 0036-8733.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 5 Dec 2001

Last Updated on STN: 25 Feb 2002

L2 ANSWER 45 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Human DNA ligase III.

AB A human DNA Ligase III polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide via gene therapy for the treatment of disorders associated with a defect in DNA Ligase III. Antagonists against such polypeptides and their use as a therapeutic to destroy unwanted cells are also disclosed. Diagnostic assays to detect mutant DNA Ligase III genes are also disclosed.

ACCESSION NUMBER: 2001:519311 BIOSIS
DOCUMENT NUMBER: PREV200100519311
TITLE: Human DNA ligase III.

AUTHOR(S): Wei, Ying-Fei [Inventor]; Yu, Guo-Liang [Inventor];

Haseltine, William A. [Inventor, Reprint author]

CORPORATE SOURCE: NW. Washington, DC, USA

ASSIGNEE: Human Genome Sciences, Inc.

PATENT INFORMATION: US 6284504 September 04, 2001

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Sep. 4, 2001) Vol. 1250, No. 1. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 7 Nov 2001

Last Updated on STN: 23 Feb 2002

L2 ANSWER 46 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Method of intracellular binding of target molecules.

AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

ACCESSION NUMBER: 2001:70861 BIOSIS DOCUMENT NUMBER: PREV200100070861

TITLE: Method of intracellular binding of target molecules. AUTHOR(S): Marasco, Wayne A. [Inventor]; Haseltine, William A.

[Inventor]

CORPORATE SOURCE: ASSIGNEE: Dana-Farber Cancer Institute, Inc.

PATENT INFORMATION: US 6072036 June 06, 2000

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (June 6, 2000) Vol. 1235, No. 1. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 7 Feb 2001

Last Updated on STN: 12 Feb 2002

L2 ANSWER 47 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Vector comprising a replication competent HIV-1 provirus and a heterologous gene.

AB A vector comprising an HIV segment and a heterologous gene segment, which produces a replication competent and an infective HIV virus is disclosed. When the heterologous gene is a marker gene, the spread of the virus can be observed in both in vitro and in vivo systems. The use of this vector in establishing methods for screening anti-viral compounds is also disclosed.

ACCESSION NUMBER: 2000:398269 BIOSIS DOCUMENT NUMBER: PREV200000398269

TITLE: Vector comprising a replication competent HIV-1 provirus

and a heterologous gene.

AUTHOR(S): Haseltine, William A. [Inventor, Reprint author];

Terwilliger, Ernest [Inventor]

CORPORATE SOURCE: Cambridge, MA, USA

ASSIGNEE: Dana-Farber Cancer Institute

PATENT INFORMATION: US 6033902 March 07, 2000

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Mar. 7, 2000) Vol. 1232, No. 1. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 20 Sep 2000

Last Updated on STN: 8 Jan 2002

L2 ANSWER 48 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Vectors containing HIV packaging sequences, packaging defective HIV vectors, and uses thereof.

AB Packaging defective and packaging proficient HIV vectors are disclosed. These vectors can be used to establish HIV packaging defective cell lines, and to package desired genes. These cell lines can be used in developing a vaccine, HIV antibodies and as part of a system for gene transfer. The packaging proficient vector can be used to target HIV target cells.

ACCESSION NUMBER: 2000:294930 BIOSIS DOCUMENT NUMBER: PREV200000294930

TITLE: Vectors containing HIV packaging sequences, packaging

defective HIV vectors, and uses thereof.

AUTHOR(S): Sodroski, Joseph G. [Inventor, Reprint author];

Haseltine, William A. [Inventor]; Poznansky, Mark

[Inventor]; Lever, Andrew [Inventor]

CORPORATE SOURCE: Pinner, UK

ASSIGNEE: Dana-Farber Cancer Institute, Boston, MA, USA

PATENT INFORMATION: US 5981276 November 09, 1999

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Nov. 9, 1999) Vol. 1228, No. 2. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 6 Jul 2000

Last Updated on STN: 7 Jan 2002

L2 ANSWER 49 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Method of intracellular binding of target molecules.

AB The present invention relates to a method by which one can target an undesired target molecule or target antigen, preferably a protein. The method comprises the intracellular expression of an antibody capable of binding to the target. A DNA sequence is delivered to a cell, the DNA sequence contains a sufficient number of nucleotides coding for the portion of an antibody capable of binding to the target operably linked to a promoter that will permit expression of the antibody in the cell(s) of interest. The antibody is then expressed intracellularly and binds to the target, thereby disrupting the target from its normal actions.

ACCESSION NUMBER: 2000:287930 BIOSIS DOCUMENT NUMBER: PREV200000287930

TITLE: Method of intracellular binding of target molecules.

AUTHOR(S): Marasco, Wayne A. [Inventor, Reprint author];

Haseltine, William A. [Inventor]

CORPORATE SOURCE: Cambridge, MA, USA

ASSIGNEE: Dana-Farber Cancer Institute, Boston, MA, USA

PATENT INFORMATION: US 5965371 October 12, 1999

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Oct. 12, 1999) Vol. 1227, No. 2. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 6 Jul 2000

Last Updated on STN: 7 Jan 2002

L2 ANSWER 50 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Discovering genes for new medicines. ACCESSION NUMBER: 1997:156571 BIOSIS DOCUMENT NUMBER: PREV199799455774

TITLE: Discovering genes for new medicines.

AUTHOR(S): Haseltine, William A.

CORPORATE SOURCE: Human Genome Sci., Rockville, MD, USA

SOURCE: Scientific American, (1997) Vol. 276, No. 3, pp. 92-97.

CODEN: SCAMAC. ISSN: 0036-8733.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 15 Apr 1997

Last Updated on STN: 15 Apr 1997

L2 ANSWER 51 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI The application of genomics to the creation of new pharmaceutical

products.

ACCESSION NUMBER: 1996:148685 BIOSIS DOCUMENT NUMBER: PREV199698720820

TITLE: The application of genomics to the creation of new

pharmaceutical products.

Haseltine, William A. AUTHOR (S):

Human Genome Sci., 9410 Key West Ave., Rockville, MD 20850, CORPORATE SOURCE:

AAAS Annual Meeting and Science Innovation Exposition, SOURCE:

(1996) Vol. 162, No. 0, pp. A2.

Meeting Info.: 1996 AAAS Annual Meeting and Science Innovation Exposition: The 162nd National Meeting of the American Association for the Advancement of Science.

Baltimore, Maryland, USA. February 8-13, 1996.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

Entered STN: 3 Apr 1996 ENTRY DATE:

Last Updated on STN: 26 Apr 1996

L2 ANSWER 52 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN ΤI

Animal model for the therapy of acquired immunodeficiency syndrome with

reverse transcriptase inhibitors.

The reverse transcriptase (RT) of the human immunodeficiency virus type 1 AB (HIV-1) is the major target for antiretroviral therapy of the acquired immunodeficiency syndrome (AIDS). While some inhibitors exhibit activity against most retroviral RTs, others are specific for the HIV-1 enzyme. develop an animal model for the therapy of the HIV-1 infection with RT inhibitors, the RT of the simian immunodeficiency virus (SIV) was replaced by the RT of HIV-1. Macaques infected with this SIV/HIV-1 hybrid virus developed AIDS-like symptoms and pathology. The HIV-1-specific RT inhibitor LY300046 cntdot HCl, but not zidovudine (3'-azido-3'deoxythymidine (AZT)) delayed the appearance of plasma antigenemia in macaques infected with a high dose of the chimeric virus. Infection of macagues with the chimeric virus seems to be a valuable model to study the in vivo efficacy of new RT inhibitors, the emergence and reversal of drug resistance, the therapy of infections with drug-resistant viruses, and the efficacy of combination therapy.

ACCESSION NUMBER: 1995:480998 BIOSIS DOCUMENT NUMBER: PREV199598495298

Animal model for the therapy of acquired immunodeficiency TITLE:

syndrome with reverse transcriptase inhibitors.

AUTHOR (S): Ueberla, Klaus [Reprint author]; Stahl-Hennig, Christiane;

Boettiger, Disa; Maetz-Rensing, Kerstin; Kaup, Franz J.;

Li, John; Haseltine, William A.; Fleckenstein,

Bernhard; Hunsmann, Gerhard; Oeberg, Bo; Sodroski, Joseph

Inst. Virol., Univ. Erlangen-Nuernberg, Schlossgarten 4, CORPORATE SOURCE:

D-91054 Erlangen, Germany

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (1995) Vol. 92, No. 18, pp.

8210-8214.

CODEN: PNASA6. ISSN: 0027-8424.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 9 Nov 1995

Last Updated on STN: 9 Nov 1995

ANSWER 53 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L_2

Molecular cloning and expression of human cDNAs encoding a novel DNA ΤI ligase IV and DNA ligase III, an enzyme active in DNA repair and recombination.

Three distinct DNA ligases, I to III, have been found previously in AB mammalian cells, but a cloned cDNA has been identified only for DNA ligase I, an essential enzyme active in DNA replication. A short peptide sequence conserved close to the C terminus of all known eukaryotic DNA ligases was used to search for additional homologous sequences in human cDNA libraries. Two different incomplete cDNA clones that showed partial homology to the conserved peptide were identified. Full-length cDNAs were obtained and expressed by in vitro transcription and translation. The

103-kDa product of one cDNA clone formed a characteristic complex with the XRCC1 DNA repair protein and was identical with the previously described DNA ligase III. DNA ligase III appears closely related to the smaller DNA ligase II. The 96-kDa in vitro translation product of the second cDNA clone was also shown to be an ATP-dependent DNA ligase. A fourth DNA ligase (DNA ligase IV) has been purified from human cells and shown to be identical to the 96-kDa DNA ligase by unique agreement between mass spectrometry data on tryptic peptides from the purified enzyme and the predicted open reading frame of the cloned cDNA. The amino acid sequences of DNA ligases III and IV share a related active-site motif and several short regions of homology with DNA ligase I, other DNA ligases, and RNA capping enzymes. DNA ligases III and IV are encoded by distinct genes located on human chromosomes 17q11.2-12 and 13q33-34, respectively.

ACCESSION NUMBER: 1995:298466 BIOSIS DOCUMENT NUMBER: PREV199598312766

TITLE: Molecular cloning and expression of human cDNAs encoding a

novel DNA ligase IV and DNA ligase III, an enzyme active in

DNA repair and recombination.

AUTHOR(S): Wei, Ying-Fei; Robins, Peter; Carter, Kenneth; Caldecott,

Keith; Pappin, Darryl J. C.; Yu, Guo-Liang; Wang, Rui-Ping; Shell, Brenda K.; Nash, Rachel A.; Schar, Primo; Barnes,

Deborah E.; Haseltine, William A.; Lindahl, Tomas

[Reprint author]

CORPORATE SOURCE: Imperial Cancer Res. Fund, Clare Hall Lab., South Mimms,

Hertfordshire EN6 3LD, UK

SOURCE: Molecular and Cellular Biology, (1995) Vol. 15, No. 6, pp.

3206-3216.

CODEN: MCEBD4. ISSN: 0270-7306.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 11 Jul 1995

Last Updated on STN: 2 Aug 1995

L2 ANSWER 54 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Functional analysis of the phosphorylation sites on the human immunodeficiency virus type 1 Vpu protein.

The human immunodeficiency virus type 1 (HIV-1)-encoded vpu product is a AB small class 1 integral membrane protein that is phosphorylated by the ubiquitous casein kinase II (CKII) in HIV-1-infected cells. The Vpu protein facilitates the release of budding virions from the surface of infected cells and delays the rate of syncytium formation. In this study, we investigated the role of phosphorylation in the biological activity of Vpu. Our results show that phosphorylation of Vpu occurs on serine residues at positions 52 and 56 located in a highly conserved dodecapeptide sequence. Mutation of either Ser 56, or both Ser 52 and Ser 56 impaired the ability of Vpu to delay the rate of syncytium formation while retaining virion release activity at levels comparable to vpu+ proviruses. Flow cytometry analysis indicates that the relative amounts of envelope glycoprotein gp120 expressed at the surface of cells transfected with these vpu mutant proviruses was two- to threefold greater than that observed on cells transfected with a vpu+ provirus. This increased expression of qp120 at the cell surface may explain the more rapid onset of syncytium formation observed in cell transfected with vpu mutant proviruses. These results suggest that Vpu-facilitated virion release and delayed cytopathic effect are the consequence of two distinct functional activities of the protein.

ACCESSION NUMBER: 1995:182902 BIOSIS DOCUMENT NUMBER: PREV199598197202

TITLE: Functional analysis of the phosphorylation sites on the

human immunodeficiency virus type 1 Vpu protein.

AUTHOR(S): Friborg, Jacques; Ladha, Azim; Gottlinger, Heinrich;

Haseltine, William A.; Cohen, Eric A. [Reprint

author]

CORPORATE SOURCE: Dep. Microbiol. Immunol., Fac. Med., Univ. Montreal, CP6128

Station A, Montreal, PQ H3C 3J7, Canada

Journal of Acquired Immune Deficiency Syndromes and Human SOURCE:

Retrovirology, (1995) Vol. 8, No. 1, pp. 10-22.

ISSN: 1077-9450.

DOCUMENT TYPE: Article English LANGUAGE:

ENTRY DATE: Entered STN: 26 Apr 1995

Last Updated on STN: 9 Jun 1995

ANSWER 55 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L2ΤI Characterization of an IL-2 dependent human T cell leukemia virus type I (HTLV-I) infected cell line: A system for studying HTLV-I mediated transformation.

AB The retrovirus Human T cell Leukemia Virus type I (HTLV-I) is the causative agent of Adult T cell Leukemia Lymphoma (ATLL) and is associated with HTLV-1 Myelopathy. HTLV-I mediated transformation of CD4+ T cells, during the course of ATLL, is poorly understood. It has been suggested that HTLV-I is responsible for the immortalization of infected cells, but transformation is dependent on secondary events. To investigate this hypothesis. we have isolated an HTLV-I infected T cell line that is dependent on IL-2 for growth in tissue culture. Further, a subclone of this cell line that is able to grow in the absence of IL-2 has been isolated. Both cell lines have identical TCR chain rearrangements and cell surface markers. Each cell line produces viral mRNAs and proteins. Finally, both of these cell lines are sensitive to rapamycin and cyclosporin A regardless of the presence of IL-2. We propose that this system will provide a unique opportunity to study transformation to IL-2 independence in HTLV-1 infected cells.

1995:127668 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV199598141968

Characterization of an IL-2 dependent human T cell leukemia TITLE:

virus type I (HTLV-I) infected cell line: A system for

studying HTLV-I mediated transformation.

Rohwer, Forest; Macmaster, William; Haseltine, William AUTHOR (S):

A.; Tsoukas, Constantine; McGuire, Kathleen L.

[Reprint author]

CORPORATE SOURCE: Dep. Biol., Mol. Biol. Inst., San Diego State Univ., San

Diego, CA 92182, USA

International Journal of Oncology, (1994) Vol. 5, No. 5, SOURCE:

> pp. 1163-1169. ISSN: 1019-6439.

DOCUMENT TYPE: Article

LANGUAGE: English

Entered STN: 29 Mar 1995 ENTRY DATE:

Last Updated on STN: 29 Mar 1995

 L_2 ANSWER 56 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Integrase mutants of human immunodeficiency virus type 1 with a specific TΤ defect in integration.

AB A previous genetic analysis of the human immunodeficiency virus type 1 integrase protein failed to identify single amino acid substitutions that only block the integration of viral DNA (C.-G. Shin, B. Taddeo, W. A. Haseltine, and C. M. Farnet, J. Virol. 68:1633-1642, 1994). Additional substitutions of amino acids that are highly conserved among retroviral integrases were constructed in human immunodeficiency virus type I and analyzed for their effects on viral protein synthesis and processing, virion morphology, and viral DNA synthesis and integration in an attempt to identify mutants with a specific defect in integration. Four single amino acid substitutions resulted in replication defective viruses. Conservative, single amino acid substitutions of the two invariant aspartic acid residues found in all retroviral integrases prevented the integration of viral DNA and had no detectable effect on the other stages in the viral replication cycle, indicating that these mutants exhibited a specific defect in integration. Mutations at two positions, S-81 and

P-109, blocked the integration of viral DNA but also resulted in the production of viral particles that exhibited reduced reverse transcriptase activity, suggesting additional defects in viral replication. Substitution of the highly conserved amino acid T66 had no effect on viral replication in a CD4+ human T-cell line. This analysis extends the range of possible phenotypes that may be produced by single amino acid substitutions in conserved residues of the integrase protein.

ACCESSION NUMBER: 1995:34040 BIOSIS DOCUMENT NUMBER: PREV199598048340

TITLE: Integrase mutants of human immunodeficiency virus type 1

with a specific defect in integration.

AUTHOR(S): Taddeo, Brunella; Haseltine, William A.; Farnet,

Chris M. [Reprint author]

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., Boston,

MA 02115, USA

SOURCE: Journal of Virology, (1994) Vol. 68, No. 12, pp. 8401-8405.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 25 Jan 1995

Last Updated on STN: 26 Jan 1995

L2 ANSWER 57 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Mutations of two PMS homologues in hereditary nonpolyposis colon cancer.

Hereditary nonpolyposis colorectal cancer (HNPCC) is one of man's commonest hereditary diseases'. Several studies have implicated a defect in DNA mismatch repair in the pathogenesis of this disease. In particular, hMSH2 and hMLH1 homologues of the bacterial DNA mismatch repair genes mutS and mutL, respectively, were shown to be mutated in a subset of HNPCC cases. Here we report the nucleotide sequence, chromosome localization and mutational analysis of hPMS1 and hPMS2, two additional homologues of the prokaryotic mutL gene. Both hPMS1 and hPMS2 were found to be mutated in the germline of HNPCC patients. This doubles the number of genes implicated in HNPCC and may help explain the relatively high incidence of this disease.

ACCESSION NUMBER: 1994:482690 BIOSIS DOCUMENT NUMBER: PREV199497495690

TITLE: Mutations of two PMS homologues in hereditary nonpolyposis

colon cancer.

AUTHOR(S): Nicolaides, Nicholas C.; Papadopoulos, Nickolas; Liu, Bo;

Wei, Ying-Fel; Carter, Kenneth C.; Ruben, Steven M.; Rosen,

Craig A.; Haseltine, William A.; Fleischmann,

Robert D.

CORPORATE SOURCE: Inq.; Kenneth W. Kinzler, Johns Hopkins Oncol. Cent.,

Baltimore, MD 21231, USA

SOURCE: Nature (London), (1994) Vol. 371, No. 6492, pp. 75-80.

CODEN: NATUAS. ISSN: 0028-0836.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 9 Nov 1994

Last Updated on STN: 9 Nov 1994

- L2 ANSWER 58 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
- TI Mutation of mutL homolog in hereditary colon cancer.
- AB Some cases of hereditary nonpolyposis colorectal cancer (HNPCC) are due to alterations in a mutS-related mismatch repair gene. A search of a large database of expressed sequence tags derived from random complementary DNA clones revealed three additional human mismatch repair genes, all related to the bacterial mutL gene. One of these genes (hMLH1) resides on chromosome 3p21, within 1 centimorgan of markers previously linked to cancer susceptibility in HNPCC kindreds. Mutations of hMLH1 that would disrupt the gene product were identified in such kindreds, demonstrating that this gene is responsible for the disease. These results suggest that defects in any of several mismatch repair genes can cause HNPCC.

ACCESSION NUMBER: 1994:228198 BIOSIS PREV199497241198 DOCUMENT NUMBER:

Mutation of mutL homolog in hereditary colon cancer. TITLE: AUTHOR (S): Papadopoulos, Nickolas; Nicoladies, Nicholas C.; Wei, Ying-Fei; Ruben, Steven M.; Carter, Kenneth C.; Rosen,

Craig A.; Haseltine, William A.; Fleischmann,

Robert D.; Fraser, Claire M.; Adams, Mark D.; Venter, J.

Craig; Hamilton, Stanley R.; Petersen, Gloria M.

Johns Hopkins Oncol. Cent., Baltimore, MD 21231, USA CORPORATE SOURCE:

Science (Washington D C), (1994) Vol. 263, No. 5153, pp. SOURCE:

1625-1629.

CODEN: SCIEAS. ISSN: 0036-8075.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 24 May 1994

Last Updated on STN: 24 May 1994

ANSWER 59 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L2

Role of the matrix protein in the virion association of the human ΤI

immunodeficiency virus type 1 envelope glycoprotein.

The matrix (MA) protein of human immunodeficiency virus type 1 (HIV-1) AB forms an inner coat directly underneath the lipid envelope of the virion. The outer surface of the lipid envelope surrounding the capsid is coated by the viral Env glycoproteins. We report here that the HIV-1 capsid-Env glycoprotein association is very sensitive to minor alterations in the MA protein. The results indicate that most of the MA domain of the Gag precursor, except for its carboxy terminus, is essential for this association. Viral particles produced by proviruses with small missense or deletion mutations in the region coding for the amino-terminal 100 amino acids of the MA protein lacked both the surface glycoprotein gp120 and the transmembrane glycoprotein gp41, indicating a defect at the level of Env glycoprotein incorporation. Alterations at the carboxy terminus of the MA domain had no significant effect on the levels of particle-associated Env glycoprotein or on virus replication. presence of HIV-1 MA protein sequences was sufficient for the stable association of HIV-1 Env glycoprotein with hybrid particles that contain the capsid (CA) and nucleocapsid (NC) proteins of visna virus. association of HIV-1 Env glycoprotein with the hybrid particles was dependent upon the presence of the HIV-1 MA protein domain, as HIV-1 Env glycoprotein was not efficiently recruited into virus particles when coexpressed with authentic visna virus Gag proteins.

ACCESSION NUMBER: 1994:169996 BIOSIS DOCUMENT NUMBER: PREV199497182996

Role of the matrix protein in the virion association of the TITLE:

human immunodeficiency virus type 1 envelope glycoprotein.

Dorfman, Tatyana; Mammano, Fabrizio; Haseltine, AUTHOR (S):

William A.; Goettlinger, Heinrich G. [Reprint author]

Div. Human Retrovirology, Dana-Farber Cancer Inst., Jimmy CORPORATE SOURCE:

Fund Build., Room 824, 44 Binney St., Boston, MA 02115, USA

Journal of Virology, (1994) Vol. 68, No. 3, pp. 1689-1696. CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

SOURCE:

Entered STN: 8 Apr 1994 ENTRY DATE:

Last Updated on STN: 8 Apr 1994

L2 ANSWER 60 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ΤI Requirement of the Pr55-gag precursor for incorporation of the Vpr product

into human immunodeficiency virus type 1 viral particles.

The human immunodeficiency virus type 1 (HIV-1) particles consists of two AB molecules of genomic RNA as well as molecules originating from gag, pol, and env products, all synthesized as precursor proteins. The 96-amino-acid Vpr protein, the only virion-associated HIV-1 regulatory protein, is not part of the virus polyprotein precursors, and its

incorporation into virus particles must occur by way of an interaction with a component normally found in virions. To investigate the mechanism of incorporation of Vpr into the HIV-1 virion, Vpr- proviral DNA constructs harboring mutations or deletions in specific virion-associated gene products were cotransfected with Vpr expressor plasmids in COS cells. Virus released from the transfected cells was tested for the presence of Vpr by immunoprecipitation with Vpr-specific antibodies. The results of these experiments show that Vpr is trans-incorporated into virions but at a lower efficiency than when Vpr is expressed from a proviral construct. The minimal viral genetic information necessary for Vpr incorporation was a deleted provirus encoding only the pr55-gag polyprotein precursor. Incorporation of Vpr requires the expression but not the processing of gag products and is independent of pol and env expression. Direct interaction of Vpr with the Pr55-gag precursor protein was demonstrated by coprecipitation experiments with gag product-specific antibodies. Overall, these results indicate that HIV-1 Vpr is incorporated into the nascent virion through an interaction with the Gag precursor polyprotein and demonstrate a novel mechanism by which viral protein can be

incorporated into virus particles.
ACCESSION NUMBER: 1994:169990 BIOSIS
DOCUMENT NUMBER: PREV199497182990

TITLE: Requirement of the Pr55-gag precursor for incorporation of

the Vpr product into human immunodeficiency virus type 1

viral particles.

AUTHOR(S): Lavallee, Claude; Yao, Xiao Jian; Ladha, Azim; Goettlinger,

Heinrich; Haseltine, William A.; Cohen, Eric A.

[Reprint author]

CORPORATE SOURCE: Lab. de Retrovirologie Humaine, Dep. de Microbiologie et

Immunologie, Fac. de Med., Univ. de Montreal, Montreal, PQ

H3C 3J7, Canada

SOURCE: Journal of Virology, (1994) Vol. 68, No. 3, pp. 1926-1934.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 8 Apr 1994

Last Updated on STN: 8 Apr 1994

L2 ANSWER 61 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN TI Genetic analysis of the human immunodeficiency virus type 1 integrase protein.

AB Single-amino-acid changes in a highly conserved central region of the human immunodeficiency virus type 1 (HTV-1) integrase protein were analyzed for their effects on viral protein synthesis, virion morphogenesis, and viral replication. Alteration of two amino acids that are invariant among retroviral integrases, D116 and E152 of HIV-1, as well as a mutation of the highly conserved amino acid S147 blocked viral replication in two CD4+ human T-cell lines. Mutations of four other highly conserved amino acids in the region had no detectable effect on viral replication, whereas mutations at two positions, N117 and Y143, resulted in viruses with a delayed-replication phenotype. Defects in virion precursor polypeptide processing, virion morphology, or viral DNA synthesis were observed for all of the replication-defective mutants, indicating that changes in integrase can have pleiotropic effects on viral replication.

ACCESSION NUMBER: 1994:169966 BIOSIS DOCUMENT NUMBER: PREV199497182966

TITLE: Genetic analysis of the human immunodeficiency virus type 1

integrase protein.

AUTHOR(S): Shin, Cha-Gyun; Taddeo, Brunella; Haseltine, William

A.; Farnet, Chris M. [Reprint author]

CORPORATE SOURCE: Dana-Farber Cancer Inst., 44 Binney St., JFB824, Boston, MA

02115, USA

SOURCE: Journal of Virology, (1994) Vol. 68, No. 3, pp. 1633-1642.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 8 Apr 1994

Last Updated on STN: 11 May 1994

L2 ANSWER 62 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Mapping of functionally important residues of a cysteine-histidine box in

the human immunodeficiency virus type 1 nucleocapsid protein.

The human immunodeficiency virus type 1 (HIV-1) nucleocapsid protein AB contains two copies of a sequence motif, the cysteine-histidine box, that is conserved among retroviruses. To identify the functionally relevant positions of a cysteine-histidine box, each amino acid in the proximal copy of the motif was individually substituted by site-directed mutagenesis. Mutations at 5 of 14 positions abolished virus replication and reduced the viral RNA content of mutant particles to between 10 and 20% of parental levels. Mutations at other positions had either no or only a minor effect on virus replication and virion RNA content. In vitro binding of RNA to bacterially expressed mutant Pr55-gag polyprotein correlated well with the effects of the mutations on particle-associated viral RNA levels. The two different copies of the motif in the HIV-1 nucleocapsid protein are not functionally equivalent, since the conversion of the proximal motif to an exact copy of the distal motif results in a defect in virus replication and a reduction in the viral RNA content of mutant particles. The simultaneous substitution of functionally relevant positions in both motifs led to a significant decline in gag protein export, indicating that the nucleocapsid domain of the gag precursor is also required for efficient assembly or release of the virion.

ACCESSION NUMBER: 1993:507511 BIOSIS DOCUMENT NUMBER: PREV199396131518

TITLE: Mapping of functionally important residues of a

cysteine-histidine box in the human immunodeficiency virus

type 1 nucleocapsid protein.

AUTHOR(S): Dorfman, Tatyana; Luban, Jeremy; Goff, Stephen P.;

Haseltine, William A.; Goettlinger, Heinrich G.

[Reprint author]

CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst., Harvard

Med. Sch., Boston, MA 02115, USA

SOURCE: Journal of Virology, (1993) Vol. 67, No. 10, pp. 6159-6169.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 5 Nov 1993

Last Updated on STN: 5 Nov 1993

L2 ANSWER 63 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Design, intracellular expression, and activity of a human anti-human

immunodeficiency virus type 1 gp120 single-chain antibody.

A single-chain antibody, derived from a human monoclonal antibody that AR recognizes the CD4 binding region of the human immunodeficiency virus type 1 (HIV-1) envelope protein, has been designed for intracellular expression in eukaryotic cells. The single-chain antibody is composed of an immunoglobulin heavy-chain leader sequence and heavy and light-chain variable regions that are joined by an interchain linker. The antibody is stably expressed and retained in the endoplasmic reticulum and is not toxic to the cells. The antibody binds to the envelope protein within the cell and inhibits processing of the envelope precursor and syncytia formation. The infectivity of the HIV-1 particles produced by cells that express the single-chain antibody is substantially reduced. These studies illustrate the feasibility of designing antibodies that bind and inactivate molecules intracellularly. Antibodies that act on target molecules within cells should provide a useful tool for research as well as for control of infectious and other diseases.

ACCESSION NUMBER: 1993:454762 BIOSIS DOCUMENT NUMBER: PREV199396099662

TITLE: Design, intracellular expression, and activity of a human

anti-human immunodeficiency virus type 1 gp120 single-chain

antibody.

AUTHOR(S): Marasco, Wayne A. [Reprint author]; Haseltine, William

A.; Chen, Siyi

CORPORATE SOURCE: Dep. Med., Dana-Farber Cancer Inst., Harvard Med. Sch.,

Harvard Sch. Public Health, 44 Binney St., Boston, MA

02115, USA

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (1993) Vol. 90, No. 16, pp.

7889-7893.

CODEN: PNASA6. ISSN: 0027-8424.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 5 Oct 1993

Last Updated on STN: 5 Oct 1993

L2 ANSWER 64 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN TI Vpu protein of human immunodeficiency virus type 1 enhances the release of

capsids produced by gag gene constructs of widely divergent retroviruses.

The Vpu protein of human immunodeficiency virus type 1 facilitates the release of virus particles from the surface of infected cells. The ability of the Vpu protein to facilitate release of Gag proteins from retroviruses that lack a Vpu-like protein was examined. The results of these experiments show that Vpu significantly increases the release of the Gag proteins of human immunodeficiency virus type 2, visna virus, and Moloney murine leukemia virus from HeLa cells. The results indicate that Vpu-mediated enhancement of particle release requires neither amino-terminal myristoylation of the Gag precursor nor cleavage of the Gag precursor by the viral protease. The results raise the possibility that Vpu modifies a cellular pathway common to the release of all retroviruses from the cell surface.

ACCESSION NUMBER: 1993:432278 BIOSIS DOCUMENT NUMBER: PREV199396086903

TITLE: Vpu protein of human immunodeficiency virus type 1 enhances

the release of capsids produced by gag gene constructs of

widely divergent retroviruses.

AUTHOR(S): Gottlinger, Heinrich G. [Reprint author]; Dorfman, Tatyana

[Reprint author]; Cohen, Eric A.; Haseltine, William

A. [Reprint author]

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney

St., Boston, MA 02115, USA

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (1993) Vol. 90, No. 15, pp.

7381-7385.

CODEN: PNASA6. ISSN: 0027-8424.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 22 Sep 1993

Last Updated on STN: 22 Sep 1993

L2 ANSWER 65 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Early molecular replication of human immunodeficiency virus type 1 in cultured-blood-derived T helper dendritic cells.

AB The rate and efficiency of key steps in the life cycle of the human immunodeficiency virus type 1 was examined in three primary cell types, T cells, monocytes, and T helper dendritic cells using the same quantity of virus involved and same cell number. The results show that viral DNA synthesis proceeds much more rapidly and efficiently in primary T helper dendritic cell populations than in primary T cell and monocyte populations. The increased rate of virus DNA synthesis is attributable either to an increase in the efficiency and the rate of uptake of the virus particles by the T helper dendritic cells, as compared with that in other cell types, or to an increased efficiency and rate of viral DNA

synthesis in the T helper dendritic cells. In the subsequent phase of viral expression the appearance of spliced viral mRNA products also occur more rapidly in cultures of primary-blood-derived T helper dendritic cells than is the case in primary T cells and monocytes. The increased efficiency of the early steps of HIV-1 replication in primary-blood-derived T helper dendritic cells than in other blood-derived mononuclear cells raises the possibility that these cells play a central role in HIV-1 infection and pathogens.

ACCESSION NUMBER: 1993:367258 BIOSIS DOCUMENT NUMBER: PREV199396052933

TITLE: Early molecular replication of human immunodeficiency virus

type 1 in cultured-blood-derived T helper dendritic cells.

AUTHOR(S): Langhoff, Erik [Reprint author]; Kalland, Karl H.;

Haseltine, William A.

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney

St., Boston, MA 02115, USA

SOURCE: Journal of Clinical Investigation, (1993) Vol. 91, No. 6,

pp. 2721-2726.

CODEN: JCINAO. ISSN: 0021-9738.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 6 Aug 1993

Last Updated on STN: 6 Aug 1993

ANSWER 66 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN TI A possible role of dendritic cells in HIV-1 replication and transmission.

ACCESSION NUMBER: 1993:353170 BIOSIS DOCUMENT NUMBER: PREV199345036595

TITLE: A possible role of dendritic cells in HIV-1 replication and

transmission.

AUTHOR(S): Langhoff, Erik; Haseltine, William A.

CORPORATE SOURCE: Div. Hum. Retrovirol., Dana-Farber Cancer Inst., Boston,

MA, USA

SOURCE: Koff, W. C. [Editor]; Wong-Staal, F. [Editor]; Kennedy, R.

C. [Editor]. AIDS Res. Rev., (1993) pp. 59-71. AIDS

Research Reviews.

Publisher: Marcel Dekker, Inc., 270 Madison Avenue, New York, New York 10016, USA; Marcel Dekker, Inc., Basel,

Switzerland. Series: AIDS Research Reviews.

CODEN: ARRVEZ. ISSN: 1056-1080. ISBN: 0-8247-9045-6.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 31 Jul 1993

Last Updated on STN: 31 Jul 1993

L2 ANSWER 67 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Effect of nef alleles on replication of human immunodeficiency virus type 1.

The effect of multiple alleles of nef of the human immunodeficiency virus type 1 (HIV-1) on virus replication was examined. Nef alleles used include some derived from isolates of virus passaged in tissue culture as well as other obtained by direct cloning of viral DNA from tissues of infected patients. The effect of nef on virus replication was evaluated in the context of a derivative of the HXB2 provirus shown previously to require nef for rapid growth in CD4+ human T cell lines and in primary peripheral blood mononuclear cells. The results of the experiments show that in this genetic context all of the studied viruses carrying nef alleles that express stable Nef proteins replicate more rapidly than do their, otherwise isogenic, nef-defective counterparts. Two of the nef alleles derived from primary tissues produce unstable proteins. These studies demonstrate that naturally occuring nef alleles can increase the rate of virus replication in both primary peripherals blood mononuclear cells and in a CD4+ T cell line. The results also demonstrate that functional variation exists among naturally occurring nef alleles.

ACCESSION NUMBER: 1993:273958 BIOSIS DOCUMENT NUMBER: PREV199396004183

TITLE: Effect of nef alleles on replication of human

immunodeficiency virus type 1.

AUTHOR(S): Zazopoulos, Emmanuel; Haseltine, William A.

[Reprint author]

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., 44 Binney

St., Boston, MA 02115, USA

SOURCE: Virology, (1993) Vol. 194, No. 1, pp. 20-27.

CODEN: VIRLAX. ISSN: 0042-6822.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 9 Jun 1993

Last Updated on STN: 9 Jun 1993

L2 ANSWER 68 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI RNA tumor viruses.

ACCESSION NUMBER: 1993:238916 BIOSIS DOCUMENT NUMBER: PREV199344112116 TITLE: RNA tumor viruses.

AUTHOR(S): Fine, Howard A. [Reprint author]; Haseltine, William

A.

CORPORATE SOURCE: Div. Clin. Oncol., Dana-Farber Cancer Inst., Boston, MA,

USA

SOURCE: Holland, J. F. [Editor]; Freii, E., III [Editor]; Bast, R.

C., Jr. [Editor]; Kufe, D. W. [Editor]; Morton, D. L. [Editor]; Weichselbaum, R. R. [Editor]. (1993) pp. 2) 265-282. Cancer medicine, Third edition, Vols. 1 and 2. Publisher: Lea and Febiger, 200 Chesterfield Parkway, Malvern, Pennsylvania 19355, USA; Lea and Febiger, London,

England, UK.

ISBN: 0-8121-1422-1.

DOCUMENT TYPE: Article

General Review; (Literature Review)

LANGUAGE: English

ENTRY DATE: Entered STN: 15 May 1993

Last Updated on STN: 15 May 1993

L2 ANSWER 69 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI The NF-kappa-B p65 promoter.

AB The promoter of the human gene encoding the p65 subunit of the transcription factor NIF-kB was cloned and the nucleotide sequence determined. The p65 promoter lacks both TATA and CCAAT consensus sequences. The p65 promoter contains three consensus binding sites of the transcription factor SP1. In contrast to the promoter of the p50 subunit of NF-KB, no sequences predicted to bind NF-KB are present in the p65 promoter. Phorbol ester (PMA) and phytohemagglutinin (PHA) treatment of Jurkat cells did not activated the p65 promoter in transient transfection experiments. Using different deletion mutants of the p65 promoter, essential promoter elements were mapped.

ACCESSION NUMBER: 1993:228529 BIOSIS DOCUMENT NUMBER: PREV199395119704

TITLE: The NF-kappa-B p65 promoter.

AUTHOR(S): Ueberla, Klaus; Lu, Yichen; Chung, Eugene; Haseltine,

William A. [Reprint author]

CORPORATE SOURCE: Dana-Farber Cancer Inst., JF824, 44 Binney St., Boston, MA

02115, USA

SOURCE: Journal of Acquired Immune Deficiency Syndromes, (1993)

Vol. 6, No. 3, pp. 227-230. CODEN: JAISET. ISSN: 0894-9255.

DOCUMENT TYPE: Article LANGUAGE: English

OTHER SOURCE: Genbank-L01459

ENTRY DATE: Entered STN: 7 May 1993

Last Updated on STN: 7 May 1993

L2 ANSWER 70 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI The effect of vpu on HIV-1-induced syncytia formation.

AB To investigate the role of vpu in the cytopathicity of human immunodeficiency type 1 (HIV-1), the MT4 CD4+ T-cell line was infected with viruses that were isogenic except for their ability to produce the vpu protein. The experiments described here demonstrate that expression of vpu reduces HIV-1 cytopathic effects by decreasing the rate of syncytia formation. By reducing the concentration of gp120 at the cell surface, vpu limits cell killing by syncytia formation.

ACCESSION NUMBER: 1993:214203 BIOSIS DOCUMENT NUMBER: PREV199395115428

TITLE: The effect of vpu on HIV-1-induced syncytia formation.

AUTHOR(S): Yao, Xiao Jian; Garzon, Simon; Boisvert, Francoise;

Haseltine, William A.; Cohen, Eric A. [Reprint

author]

CORPORATE SOURCE: Lab. de Retrovirol. Hum., Dep. Microbiol. Immunol., Fac.

Med., Univ. Montreal, Montreal, PQ H3C 3J7, Canada

SOURCE: Journal of Acquired Immune Deficiency Syndromes, (1993)

Vol. 6, No. 2, pp. 135-141.

CODEN: JAISET. ISSN: 0894-9255.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 1993

Last Updated on STN: 23 Apr 1993

L2 ANSWER 71 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Disulfide bond formation in the human immunodeficiency virus type 1 Nef protein.

AB Substitution of alanine for cysteine residues of the human immunodeficiency virus type 1 LAI (BRU) and ELI Nef proteins was used to determine pairing of the cysteine residues present in each protein. The results show that under nonreducing conditions, alternative pairing of the cysteines occurs. The preferred pairing of cysteine residues of the LAI and ELI proteins differs. In the experimental system used, viruses carrying the ELI nef allele are found to express Nef proteins which accelerate virus replication. Mutation in critical cysteine residues of the protein reduce the rate of virus replication. In the same system, viruses harboring the LAI nef allele fail to replicate. These observations raise the possibility that differences in the observed biological activity of nef alleles may be attributed, at least in part, to differences in the secondary structure of the proteins.

ACCESSION NUMBER: 1993:214199 BIOSIS DOCUMENT NUMBER: PREV199395115424

TITLE: Disulfide bond formation in the human immunodeficiency

virus type 1 Nef protein.

AUTHOR(S): Zazopoulos, Emmanuel; Haseltine, William A.

[Reprint author]

CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst., 44

Binney St., Boston, MA 02115, USA

SOURCE: Journal of Virology, (1993) Vol. 67, No. 3, pp. 1676-1680.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 1993

Last Updated on STN: 24 Apr 1993

- L2 ANSWER 72 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
- TI Influence of human T-cell leukemia virus type I tax and rex on interleukin-2 gene expression.
- AB The X region of human T-cell leukemia virus type I (HTLV-I) encodes two proteins that regulate viral gene expression. The tax protein is the product of the transactivator gene and has been shown to up-regulate the

expression of some cellular genes controlling T-cell replication, including that of the interleukin-2 (IL-2) T-cell growth hormone and the alpha chain of its receptor (IL-2R). Several studies have shown that tax transactivation of the IL-2R alpha-chain promoter is mediated by binding sites for the transcriptional activator NF-kappa-B, and this mechanism has also been implicated in the tax activation of IL-2 promoter activity. The rex gene product of HTLV-1 regulates viral protein production by influencing mRNA expression and has been implicated in the stabilization of IL-2R alpha-chain mRNA. In the present studies, the ability of the tax and rex proteins to transactivate IL-2 gene expression has been reinvestigated. The ability of the tax protein to transactivate IL-2 promoter activity appears, at least in part, to be mediated by the recognition sequence for a DNA-binding complex known as CD28RC. Consistent with this hypothesis is the observation that tax-mediated activation of IL-2 gene expression is resistant to the immunosuppressive affects of cyclosporin A, a property postulated for the CD28RC binding complex. Unexpectedly, this tax-mediated up-regulation of IL-2 expression is synergized by the presence of the rex protein. These findings demonstrate that transactivation of IL-2 gene expression by tax is augmented by mechanisms distinct from NF-kappa-B and raise the possibility that rex, as well as tax, contributes to the oncogenic capability of HTLV-I by altering the expression of the IL-2 gene in T cells infected with this retrovirus.

ACCESSION NUMBER: 1993:209106 BIOSIS DOCUMENT NUMBER: PREV199395110331

TITLE: Influence of human T-cell leukemia virus type I tax and rex

on interleukin-2 gene expression.

AUTHOR(S): McGuire, Kathleen L. [Reprint author]; Curtiss, Virginia

E.; Larson, Erica L.; Haseltine, William A.

CORPORATE SOURCE: Dep. Biol., Coll. Sci., San Diego State Univ., San Diego,

CA 92182-0057, USA

SOURCE: Journal of Virology, (1993) Vol. 67, No. 3, pp. 1590-1599.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 1993

Last Updated on STN: 23 Apr 1993

L2 ANSWER 73 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Complex-type N-linked oligosaccharides of gp120 from human

immunodeficiency virus type 1 contain sulfated N-acetylglucosamine. AB The major envelope glycoproteins gp120 and gp41 of human immunodeficiency

virus type 1, the causative agent for human AIDS, contain numerous N-linked oligosaccharides. We report here our discovery that N-acetylglucosamine residues within the complex-type N-linked oligosaccharides of both gp120 and its precursor, gp160, are sulfated. When human Molt-3 cells persistently infected with human T-cell leukemia virus III-B were metabolically radiolabeled with 35SO-4, gp160, gp120, and to some extent gp41 were radiolabeled. The 35SO-4-labeled oligosaccharides were quantitatively released by N-glycanase treatment and were bound by immobilized Ricinus communis agglutinin I, a lectin that binds to terminal P-galactosyl residues. The kinetics of release of sulfate upon acid hydrolysis from 35SO-4-labeled qp120 indicate that sulfation occurs in a primary sulfate ester linkage. Methylation analysis of total glycopeptides from Molt-3 cells metabolically radiolabeled with (3H) glucosamine demonstrates that sulfation occurs at the C-6 position of N-acetylglucosamine. Fragmentation of the gp120-derived 35SO-4-labeled glycopeptides by treatment with hydrazine and nitrous acid and subsequent reduction generated galactosyl-anhydromannitol-6-35SO-4, which is the expected reaction product from GlcNAc-6-sulfate within a sulfated lactosamine moiety. Charge analysis of the (3H)galactose- and (3H) glucosamine-labeled glycopeptides from gp120 and gp160 indicates that approximately 14% of the complex-type N-linked oligosaccharides are sulfated.

ACCESSION NUMBER: 1993:148372 BIOSIS DOCUMENT NUMBER: PREV199395081172

Complex-type N-linked oligosaccharides of gp120 from human TITLE:

immunodeficiency virus type 1 contain sulfated

N-acetylglucosamine.

Shilatifard, Ali; Merkle, Roberta K.; Helland, Dag E.; AUTHOR (S):

Welles, Jacqueline L.; Haseltine, William A.;

Cummings, Richard D. [Reprint author]

Dep. Biochem. and Molecular Biol., Univ. Okla. Health Sci. CORPORATE SOURCE:

Cent., P.O. Box 26901, 941 S. L. Young Boulevard, Oklahoma

City, OK 3104, USA

Journal of Virology, (1993) Vol. 67, No. 2, pp. 943-952. SOURCE:

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

Entered STN: 16 Mar 1993 ENTRY DATE:

Last Updated on STN: 17 Mar 1993

L2 ANSWER 74 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Infection of human natural killer (NK) cells with replication-defective ΤI human T cell leukemia virus type I provirus: Increased proliferative capacity and prolonged survival of functionally competent NK cells.

AB Human T-cell leukemia virus type I (HTLV-I) can infect a variety of human cell types, but only T lymphocytes are efficiently immortalized after HTLV-I infection. This study reports an attempt to infect and to immortalize NK cells with HTLV-I. Co-cultivation of freshly isolated NK cells with a HTLV-I-producing T cell line did not result in NK cell infection. However, NK cells activated with an anti-CD16 mAb and co-cultivated with a HTLV-I-producing T cell line were reproducibly infected by HTLV-I. HTLV-I infection was documented in NK cell lines and clones by the detection of defective integrated provirus by both Southern blot and polymerase chain reaction analysis. Although HTLV-I-infected NK cells produced viral proteins, they did not produce infectious viral particles. HTLV-I-infected NK cells have phenotypically indistinguishable from their uninfected counterparts (CD16+, CD2+, CD56+, CD3-). They also retained the ability to mediate both natural and antibody-dependent cell cytotoxicity. The IL-2-dependent proliferation of HTLV-I-infected NK cells was significantly greater than that of uninfected NK cells. The doubling time of this infected population was reduced from 9 days to 3 days, and the overall survival of the culture in the absence of restimulation was extended from 5 wk to 18 wk. Unlike T lymphocytes, HTLV-I-infected NK cells were not immortal, implying a fundamental difference between these two lymphocyte populations.

ACCESSION NUMBER: 1993:118274 BIOSIS DOCUMENT NUMBER: PREV199395062374

TITLE: Infection of human natural killer (NK) cells with

replication-defective human T cell leukemia virus type I provirus: Increased proliferative capacity and prolonged

survival of functionally competent NK cells.
Lo, K. M. Steve; Vivier, Eric; Rochet, Nathalie; Dehni,
Ghassan; Levine, Herbert; Haseltine, William A.; AUTHOR (S):

Anderson, Paul [Reprint author]

CORPORATE SOURCE: Div. Tumor Immunology, Dana-Farber Cancer Inst., 44 Binney

St., Boston, Mass. 02115, USA

Journal of Immunology, (1992) Vol. 149, No. 12, pp. SOURCE:

4101-4108.

CODEN: JOIMA3. ISSN: 0022-1767.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 27 Feb 1993

Last Updated on STN: 27 Feb 1993

ANSWER 75 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN L2Infection of accessory dendritic cells by human immunodeficiency virus ΤI

type 1.

ACCESSION NUMBER: 1993:86648 BIOSIS DOCUMENT NUMBER: PREV199344040898

TITLE: Infection of accessory dendritic cells by human

immunodeficiency virus type 1.

AUTHOR(S): Langhoff, Erik; Haseltine, William A. [Reprint

author]

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber Cancer Inst., Harv.

Med. Sch., 44 Binney St., Boston, Mass. 02115, USA

SOURCE: Journal of Investigative Dermatology, (1992) Vol. 99, No.

5, pp. 89S-94S.

Meeting Info.: Third International Workshop on Langerhans

Cells. Dallas, Texas, USA. December 5-6, 1991.

CODEN: JIDEAE. ISSN: 0022-202X.

DOCUMENT TYPE: Article

Conference; (Meeting)

LANGUAGE: English

ENTRY DATE: Entered STN: 1 Feb 1993

Last Updated on STN: 1 Feb 1993

L2 ANSWER 76 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Ganglioside-induced CD4 endocytosis occurs independent of serine phosphorylation and is accompanied by dissociation of P56-lck.

AB Gangliosides induce a selective and complete modulation of CD4 from the surface of T cells. CD4 down-modulation occurs by CD4 endocytosis. This process is independent of serine phosphorylation of the cytoplasmic tail or CD4 and does not require the association between the tyrosine protein kinase p56-lck and the cytoplasmic tail of CD4. Ganglioside induced CD4 endocytosis is accompained by the loss of p56-lck activity associated with CD4. Sequential immunoprecipitation analysis using an anti-CD4 antibody and an anti-p56-lck antiserum showed that this is caused by the dissociation of the enzyme from the cytoplasic tail of CD4. The kinetics of p56-lck dissociation after ganglioside treatment is identical to that of CD4 endocytosis, suggesting that p56-lck is displaced in the process of endosome formation. The results indicate that CD4 endocytosis alone can cause the dissociation of the p56-lck complex without the requirement for Cd4 phosphorylation.

ACCESSION NUMBER: 1993:74771 BIOSIS DOCUMENT NUMBER: PREV199395039271

TITLE: Ganglioside-induced CD4 endocytosis occurs independent of

serine phosphorylation and is accompanied by dissociation

of P56-lck.

AUTHOR(S): Repke, Heinrich [Reprint author]; Barber, Elizabeth;

Ulbricht, Stefanie; Buchner, Klaus; Hucho, Ferdinand; Kopp,

Richard; Scholz, Hans; Rudd, Christopher E.;

Haseltine, William A.

CORPORATE SOURCE: Div. Human Retrovirol., Dana-Farber-Cancer Inst., 44 Binney

St., Boston, MA 02115, USA

SOURCE: Journal of Immunology, (1992) Vol. 149, No. 8, pp.

2585-2591.

CODEN: JOIMA3. ISSN: 0022-1767.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 26 Jan 1993

Last Updated on STN: 27 Jan 1993

L2 ANSWER 77 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Role of vif in replication of human immunodeficiency virus type 1 in CD4-positive T lymphocytes.

AB The viral infectivity factor gene vif of human immunodeficiency virus type 1 has been shown to affect the infectivity but not the production of virus particles. In this study, the effect of vif in the context of the HXB2 virus on virus replication in several CD4+ T-cell lines was investigated. vif was found to be required for replication in the CD4+ T-cell lines CEM

and H9 as well as in peripheral blood T lymphocytes. vif was not required for replication in the SupTl, C8166, and Jurkat T-cell lines. The infectivity of vif-defective viruses depended on the cell type in which the virus was produced. In CEM cells, vif was required for production of virus capable of initiating infection in all cell lines studied. vif-defective virus produced by SupT1, C8166, and Jurkat cells and the monkey cell line COS-1 could initiate infection in multiple cell lines, including CEM and H9. These results suggest that vif can compensate for cellular factors required for production of infectious virus particles that are present in some cell lines such as SupT1, C8166, and Jurkat but are absent in others such as CEM and H9 as well as peripheral blood T lymphocytes. The effect of vif was not altered by deletion of the carboxyl terminus of gp41, a proposed target for vif (B. Guy, M. Geist, K. Dott, D. Spehner, M.-P. Kieny, and J.-P. Lecocq, J. Virol. 65:1325-1331, 1991). These studies demonstrate that vif enhances viral infectivity during virus production and also suggest that vif is likely to be important for natural infections.

ACCESSION NUMBER: 1993:34860 BIOSIS DOCUMENT NUMBER: PREV199395023060

TITLE: Role of vif in replication of human immunodeficiency virus

type 1 in CD4-positive T lymphocytes.

AUTHOR(S): Gabuzda, Dana H.; Lawrence, Katharine; Langhoff, Erik;

Terwilliger, Ernest; Dorfman, Tatyana; Haseltine,

William A.; Sodroski, Joseph [Reprint author]

CORPORATE SOURCE: Division Human Retrovirology, Dana-Farber Cancer Institute,

44 Binney Street, Boston, Mass. 02115, USA

SOURCE: Journal of Virology, (1992) Vol. 66, No. 11, pp. 6489-6495.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Dec 1992

Last Updated on STN: 23 Dec 1992

L2 ANSWER 78 OF 78 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Characterization of the cDNA of a broadly reactive neutralizing human anti-gp120 monoclonal antibody.

The F105 mAb, identified in an HIV-1-infected individual, binds to a AB discontinuous epitope on HIV-1 gp120 envelope glycoprotein, blocks the binding of gp120 to CD4 viral receptor, and neutralizes a broad range of HIV-1 isolates. This study reports the primary nucleotide and deduced amino acid sequences of the rearranged heavy and light chains of the mAb F105. This IgG-1k mAb uses a V-H gene member of the V-H4 gene family (V71-4) and is productively rearranged with a D-D fusion product of the dlr4 and da4 germline D-H genes and the J-H5 gene. This rearrangement heavy chain gene expresses the V-H4-HV2a idiotope, which is seen in human monoclonal IgM colde agglutinins. The F105 V-k appears to be derived from the Humvk325 germline gene and is rearranged with a J-k2 gene. For both chains, the mutational pattern in the rearranged V-H and V-L genes is indicative of an antigen-driven process. These studies show that production of a broadly neutralizing anti-HIV-1 antibody that recognizes determinants within the CD4 recognition sites of the envelope glycoprotein is achieved by rearrangement of the V71-4 and Humvk325 germline variable region genes along with selected individual point mutations in the rearranged genes.

ACCESSION NUMBER: 1993:28788 BIOSIS DOCUMENT NUMBER: PREV199395016988

TITLE: Characterization of the cDNA of a broadly reactive neutralizing human anti-gp120 monoclonal antibody.

AUTHOR(S): Marasco, Wayne A. [Reprint author]; Bagley, Jessamyn; Zani,

Christy; Posner, Marshall; Cavacini, Lisa; Has ltine,

William A.; Sodroski, Joseph

CORPORATE SOURCE: Div. Human Retrovirology, Dana-Farber Cancer Inst. 44

Binney St., Boston, Mass. 02115, USA

SOURCE: Journal of Clinical Investigation, (1992) Vol. 90, No. 4,

pp. 1467-1478.

CODEN: JCINAO. ISSN: 0021-9738.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Dec 1992

Last Updated on STN: 23 Dec 1992

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L6 3 ALBUMIN FUSION PROTEIN (W) SHELF LIFE

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L6 ANSWER 1 OF 3 USPATFULL on STN

TI Albumin fusion proteins

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

ACCESSION NUMBER: 2003:282700 USPATFULL TITLE: Albumin fusion proteins

INVENTOR(S): Ballance, David J., Berwyn, PA, UNITED STATES
Sleep, Darrell, West Bridgford, UNITED KINGDOM

Sleep, Darrell, West Bridgford, UNITED KINGDOM Prior, Christopher P., Rosemont, PA, UNITED STATES Sadeghi, Homayoun, Doylestown, PA, UNITED STATES Turner, Andrew J., Eagleville, PA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003199043	Al	20031023	
APPLICATION INFO.:	US 2001-832501	A 1	20010412	(9)

			NUMBER	DATE	
PRIORITY	INFORMATION:	US	2000-256931P	20001221	(60)
			2000-199384P	20000425	
		US	2000-229358P	20000412	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 60 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 18 Drawing Page(s)

LINE COUNT: 14339

L6 ANSWER 2 OF 3 USPATFULL on STN

TI Albumin fusion proteins

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion

proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:244853 USPATFULL Albumin fusion proteins

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES

Sadeghi, Homayoun, Doylestown, PA, UNITED STATES Prior, Christopher P., Rosemont, PA, UNITED STATES Turner, Andrew J., Eagleville, PA, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-256931P 20001221 (60)

US 2000-199384P 20000425 (60) US 2000-229358P 20000412 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 59 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 20 Drawing Page(s)

LINE COUNT: 13208

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 3 USPATFULL on STN

TI Albumin fusion proteins

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:181414 USPATFULL TITLE: Albumin fusion proteins

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003125247	Al	20030703	
APPLICATION INFO.:	US 2001-833041	A 1	20010412	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 29

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 15235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.